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1834

A

COMPENDIUM

OF

MIDWIFERY,

Under the Three General Heads of

Theory, Practice, and Diſeaſes;

WITH AN

APPENDIX,

CONTAINING,

A ſhort Eſſay on the Virtues and Operations of Uterine Medicines, and on the Powers of Opium and Musk,

AND A

FORMULA of PRESCRIPTIONS,

OR

PHARMACOPŒIA OBSTETRICARIA.

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MDCCLXVI.

1766.

COMPENDIUM
MIDWIFERY,
OR,
Theory, Practice, and Diseases
OF
WOMEN AND CHILDREN.

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ADVERTISEMENT.

THE following Pages are merely an Abſtract of a Courſe of Lectures, which may hereafter appear at large, if not anticipated by ſome ſimilar and more uſeful Publication on the ſame Subject: they are at preſent intended only to ſave the Students the Trouble of taking Notes; to prevent what is taught them in the Lectures they attend from eſcaping their Notice, and their Judgments from being miſled by imperfect Obſervations taken in a Hurry: the Time allowed for the Perſuit of this Study, being generally too ſhort to admit of ſuch Opportunities of practical Improvement, as the Abſtruſeneſs of the Art requires.

Midwifery is ſeldom practiſed alone by thoſe who profeſs it, and moſt Gentlemen at the Time they attend this, are engaged alſo in the Study of ſome other Branches of Knowledge, equally important to a general Practice of the healing Art; wherefore, their Time being thus engroſſed, and their Attention ſo divided, I flatter myſelf I ſhall do no unwelcome Service to thoſe Gentlemen, who honour me with their Attendance for this very material Part of their Education, in thus preſenting them with a compen-

dious View of the more eſſential Principles of the obſtetric Art; there being no Branch of the medical Science, wherein Life is more immediately dependant on the Conduct and Skill of the Practitioner, and conſequently none, wherein a Sett of cautionary Precepts are more indiſpenſably neceſſary to be retained in the Memory.

INTRO-

INTRODUCTION.

THE Art of Midwifery depends on a few ſimple and obvious Principles, chiefly deducible from the Laws of Mechanics. It is a Branch of the Medical Science, tho' ſtrictly ſpeaking, a chirurgical Operation; and tho' at this Time, almoſt every Surgeon is an *Accoucheur*, the Practice was, for many Years, with Reſpect to the more perilous Caſes, almoſt wholly confined to the Phyſician only, for, as the Surgeon was not looked upon as properly qualified to proceed farther than the manual Operation, the various Contingencies, that afterwards required the Aſſiſtance of Medicine, eſtabliſhed the Practice in the Hands of the Phyſician. Hence it has long been conſidered as an Art in itſelf, independent of any other, and not included in the Perſuit of Anatomical or Medical Studies, of both which it is properly a Branch.

In the earlier Ages of the World, one and the ſame Man practiſed the medical Science in all its various Branches. It was afterwards divided into *Phyſic* and *Surgery*, to the End that each, being ſeparately ſtudied, might be cultivated to more Advantage.

Yet

Yet from this Separation, ſo truly calculated for the general Benefit of Mankind, one Inconvenience ſeems to have ariſen; ſince ſome Profeſſors of Surgery only, meerly as ſuch, pay too little Attention to the Study of Medicine; but this is certainly an Error of Omiſſion in the Student, for tho' we are greatly benefited by the united Labours of the many, who have improved and enlarged the ſeveral Branches of this extenſive Science, by their diligent Reſearches, and ingenious Obſervations, the Student in either Profeſſion who entirely neglects the other, will attain only a Sort of ſuperficial, or partial Knowledge, and in the Courſe of his future Practice, frequently find himſelf much at a Loſs.

The Study of Midwifery therefore, as in itſelf an Art, or as a Branch of Surgery only, ſhould always be preceded by the Study of Mechanics and Medicine, for we cannot too diligently ſearch the Means of Perfection, as far as it is attainable by Human Nature, in an Art of ſuch Importance; ſince the Errors that may be committed in the Exerciſe of it, are of the utmoſt Conſequence, as not only the Health and Welfare, but the Life itſelf of Mankind, is intereſted therein.

The Art of Healing, is indeed of great Extent. The Variety of the Parts which compoſe the Human Body, the Multiplicity of Things which may offend them, and the different Means that muſt be employed, to remedy all the Diſorders, which theſe Cauſes of Offence may produce, require in fact, more Knowledge, than the moſt elevated, the moſt penetrating, or the moſt extenſive

tenſive Genius can attain to, during the ſhort Space of the longeſt Life: hence it was ſaid, by the Father of Medicine, that *Art is long, and Life is ſhort.*

Midwifery has in all Ages, been thought worthy the Study of ingenious Men; ſince there have not been wanting, Perſons of Learning from the Time of *Hippocrates*, to the preſent Day, who have taken great Pains, in the Improvement of this moſt uſeful Art: and when we reflect on the pleaſing Advantages, which may accrue to Mankind, from the right Exerciſe of it, we ſhall not in the leaſt wonder, it has fixed the Attention, and employed the Pens, of the moſt ingenious and learned Profeſſors.

Every Individual, who propoſes to exerciſe any Branch of the Medical Science, muſt, previous to his Entrance on Practice, acquire a general Knowledge of the Human Syſtem; the Structure of the Body, and the Functions of its various Parts, being highly requiſite to be known, before the Nature of any Diſeaſe can be perfectly underſtood: for, unleſs we know what a Body is in Health, it is impoſſible we ſhould aſcertain its Defects, when it deviates from an healthful State.

Before the Art of Healing was enlightened and improved by the Study of Anatomy, this particular Branch of it, muſt have been very imperfectly underſtood, and even in the moſt common Caſes, very rudely, and in the extreme ones, very unſucceſsfully practiſed: true it is, thoſe extreme Caſes do not often occur, but they who

are

are of Opinion that Nature, even in thoſe Circumſtances, never requires any extraordinary Aſſiſtance, muſt build that Opinion on a Contradiction of poſitive Facts, and he muſt be a very ſuperficial and unphiloſophical Reaſoner, who would diſcountenance the prudent Exertion of every poſſible Means of Relief, were it only to ſhorten the Moments of Anxiety and Suſpence, where that can be done with a moral Certainty of Succeſs; which Means of Relief can only be prudently or ſucceſsfully exerted, by thoſe who have ſtudied Anatomy, and the Laws of Mechanics, the moſt material Elements of the Obſtetric Art, being founded on mixed Principles, equally mechanical and anatomical.

Mechanics is a mixed, mathematical Science, which conſiders Motion and moving Powers, their Nature and Laws, with the Effects thereof. That which conſiders the Motion of Bodies, ariſing from Gravity, is called Statics, in Contradiſtinction to that Part, which conſiders the mechanical Powers, and their Application, properly called Mechanics.

Mechanical Powers denote the ſix ſimple Machines, to which all others, how complex ſoever are reducible; theſe are, the Balance, Wedge, Lever, Wheel, Pulley and Screw, but may, however, be all reduced to one, viz. the Lever, the Principles whereon they depend, being nearly the ſame in all.

Statics is the Branch of this Science, which has the neareſt Analogy with the Study of Midwifery, and the Lever, the only adventitious

Member

Member required, to aſſiſt the Operations of the animal Machine, in the Act of Parturition.

There is a Power inherent in all Bodies, whereby they tend to ſome Common Point call'd the Centre of Gravity; and that, with a greater or leſs Velocity, as they are more or leſs denſe, or as the Medium they paſs through, is more or leſs rare. In the common Uſe of Language, Weight and Gravity are conſidered as one and the ſame Thing; ſome Authors, however, hold Gravity, only to expreſs, a *Niſus*, or Endeavour to deſcend; but Weight, an actual Deſcent. But there is ſtill Room for a better Diſtinction; in Effect, one may conceive Gravity to be the Quality as inherent in a Body, and Weight, the ſame Quality, exerting itſelf, either againſt an Obſtacle or otherwiſe.

The Action of Nature in the Birth of a child, may be compared to a Weight, deſcending, or a Body being moved to a given Point or Centre of Gravity, aſſiſted by the adventitious Powers of a propeling Lever, through an irregular cylindric Paſſage, the Diameter of which is barely ſufficient to admit of ſuch Protruſion; and in this View, the Aperture of the Pelvis, is the Centre of Gravity, and the Muſcles ſet in Action by the Labour-pains, are the propeling Lever.

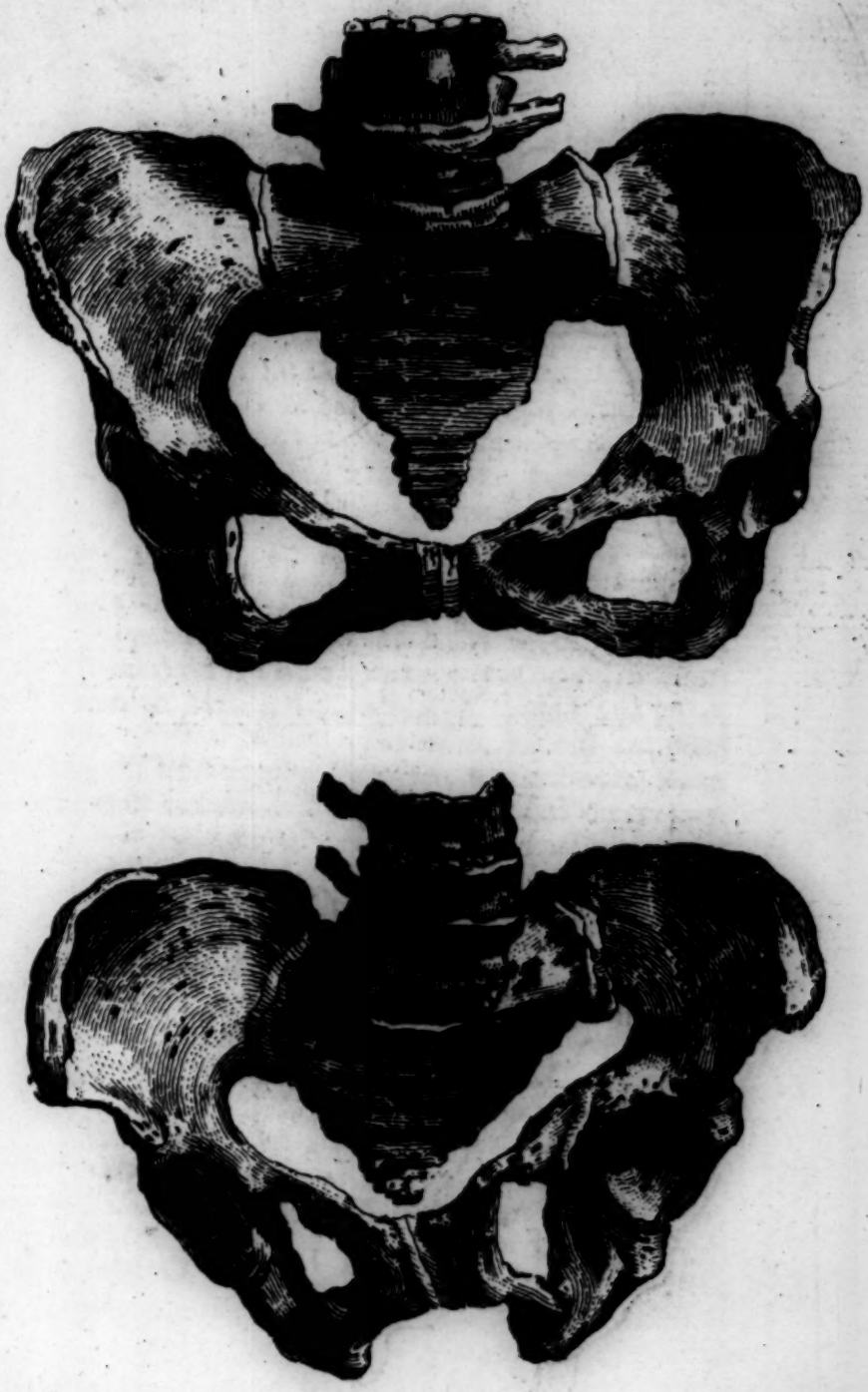
Hence it will appear, that an Idea of the mechanical Powers, will not only aſſiſt us in accounting for the Means, whereby this admirable Phenomenon of Nature, may be facilitated or impeded, but will alſo direct us, in the Method of removing any Impediments, or obviating any

Obſtacles

Obſtacles we may meet with, by aſſiſting the propeling Force from within, by the Application of proper Aſſiſtants or Levers, from without, in which Light, the inſtrumental Method of Delivery may with great Propriety be conſidered.

Whoever propoſes to ſet out in this Profeſſion, muſt conſider himſelf as engaged in a Taſk, that will require the utmoſt Exertion of his Faculties, and of human Foreſight and Patience; he muſt be arm'd with a Preſence of Mind, ſufficient to withſtand the Surprize, which any Accident, may throw him into, and be able, readily to fix his Attention on the Caſe before him, coolly and deliberately recollecting, every Circumſtance that may help to extricate his Patient from Peril, and himſelf from Perplexity. He muſt habituate himſelf to an eaſy, affable, and humane Deportment; and when a lingering Caſe requires his conſtant and protracted Attendance, muſt, without repining, ſubmit to the Confinement, and at no Time, either by a Peeviſhneſs of Temper, or Indelicacy of Expreſſion, deſtroy that Confidence, which the tender Patient muſt neceſſarily place in him, who ſubmits her own Life, and that of her Infant, often more dear to her than her own, to his Mercy and Judgment. He muſt think himſelf accountable for all the Miſcarriages which may ariſe, from a precipitate or dilatory Conduct, and remember, that he has, at all Times two, and frequently more Lives committed to his Charge.

A COM-



W. Poculp

Tab: I

Fig: I

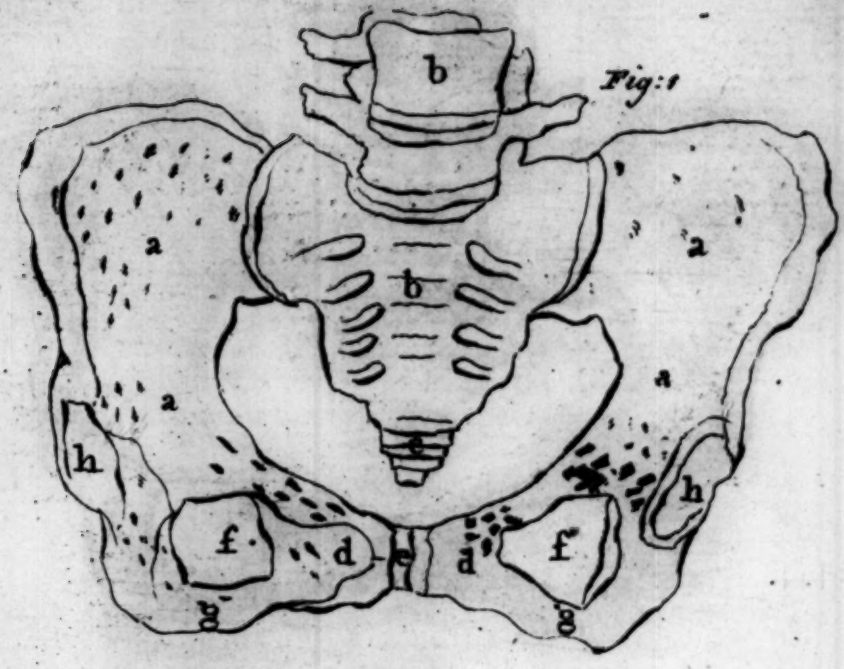


Fig: II



TABLE I.

Perſpective Views of the Pelvis.

FIG. { 1. A well conſtructed. } Pelvis.
{ 2. A deformed }

a. Ilium.

b. Sacrum.

c. Coccyx.

d. Pubes.

e. Symphyſis of the Pubes.

f. Foramen Magnum.

g. Tuberoſity of the Iſchium; or, Seat Bone.

h. Acetabulum.

TABLE II.

View through the Pelvis.

FIG. { 1. View through the Brim.
2. View through the Aperture of a well conſtructed Pelvis.

a. Ilium.

b. Sacrum.

c. Coccyx.

d. Acute Proceſs of the Iſchium.

e. Pubes.

f. Symphyſis of the Pubes.

g. Foramen Magnum.

h. Tuberoſity of the Iſchium; or, Seat-bone.

i. Acetabulum.

Fig: 1

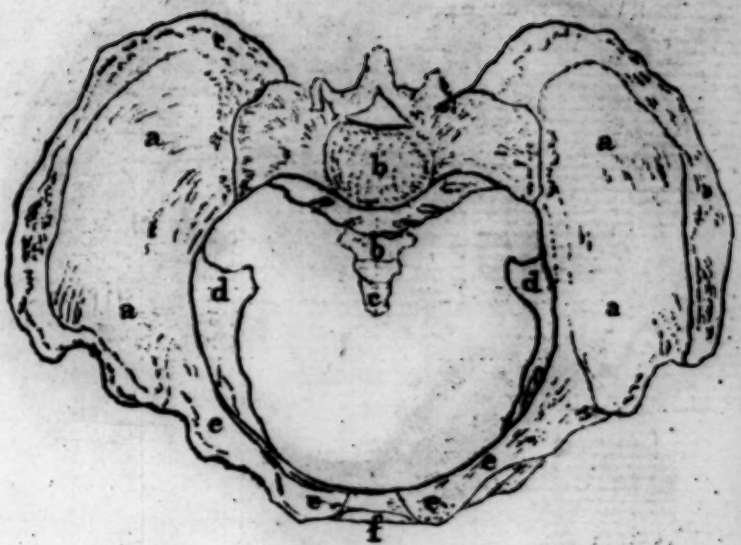
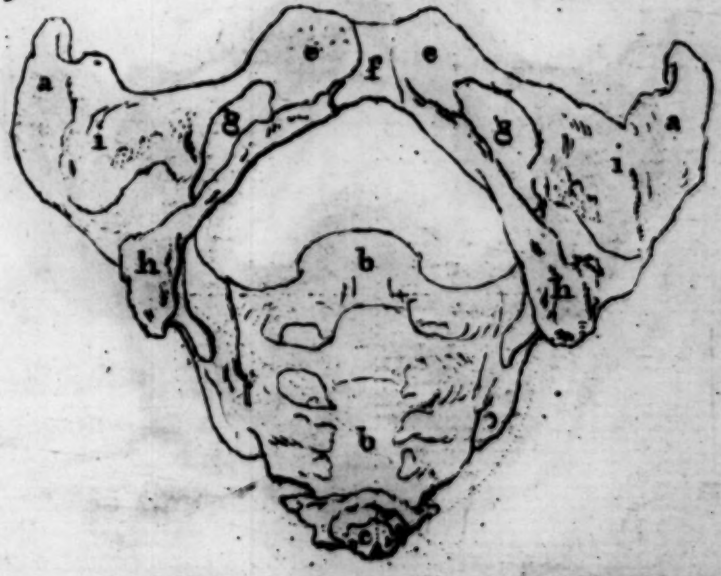
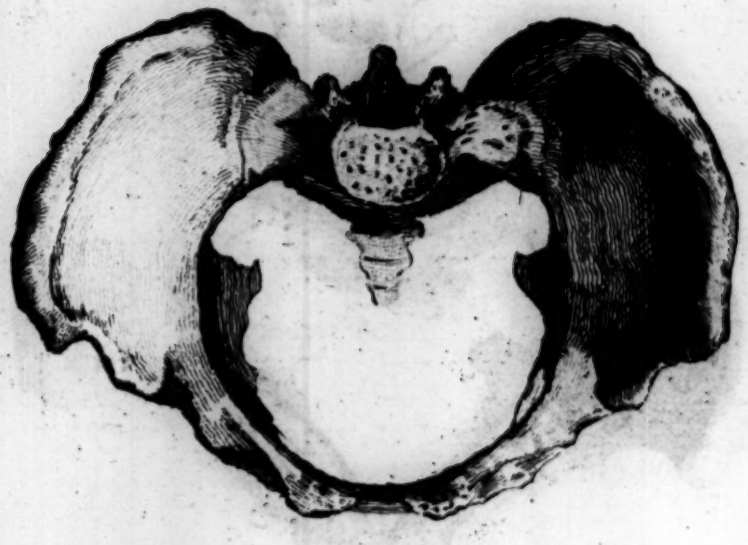
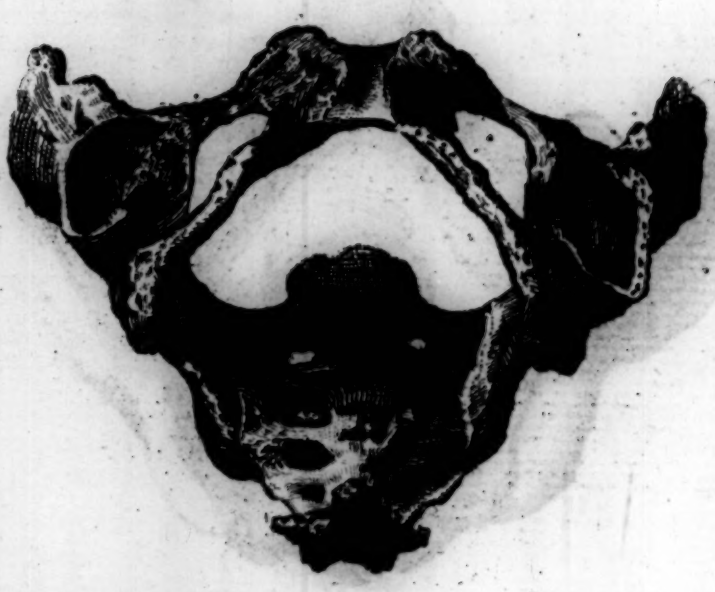
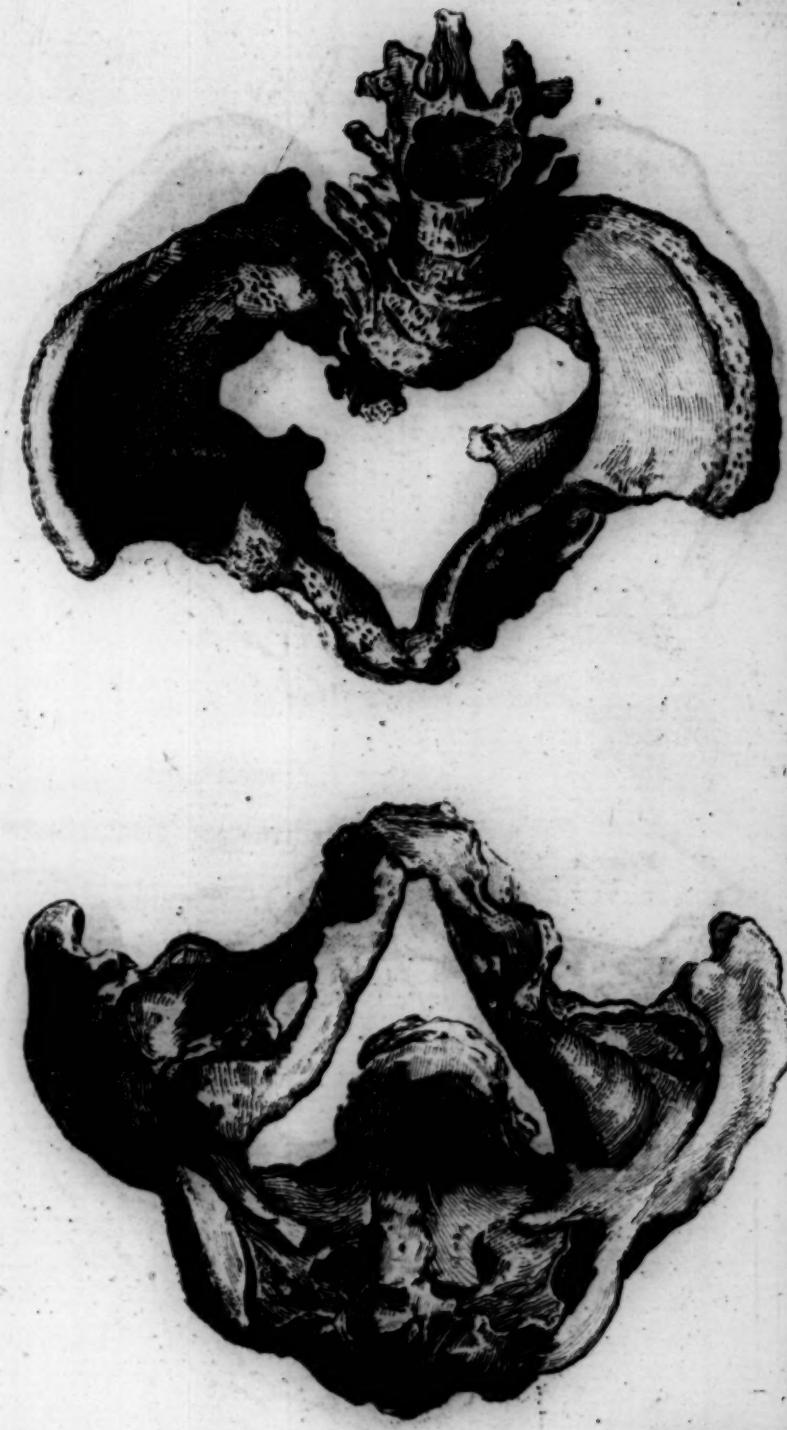


Fig: 2









T. S sculp

Tab: 8^a

Fig: 1



Fig: 2

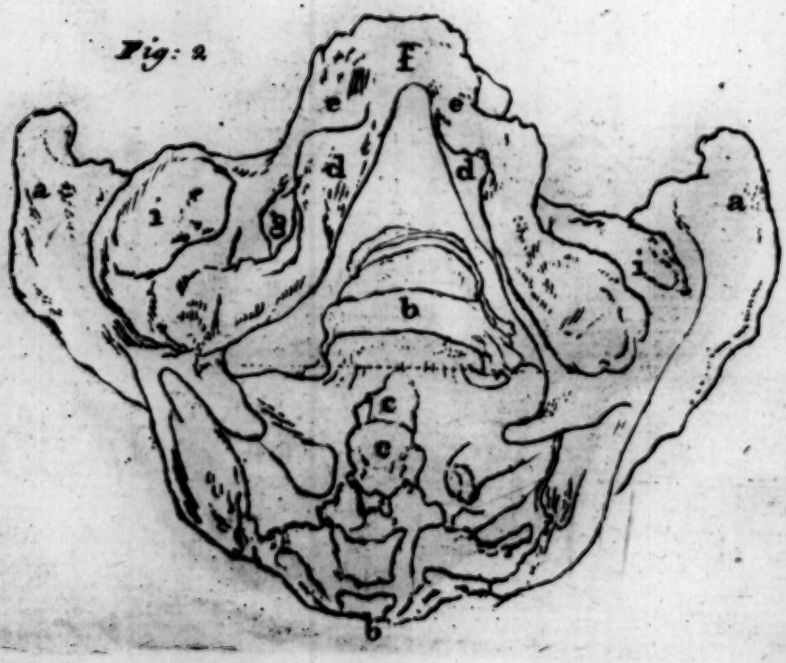


TABLE III.

FIG. { 1. View through the Brim.
2. View through the Aperture of a deformed Pelvis.

a. Ilium.

b. Sacrum.

c. Coccyx.

d. Acute Proceſs of the Iſchium.

e. Pubes.

f. Symphyſis of the Pubes.

g. Foramen Magnum.

h. Tuberoſity of the Iſchium; or, ſeat-bone.

i. Acetabulum.

TABLE IV.

FIG. 1. Section of the Pelvis.

a. Vertebræ of the Loins.

b. Sacrum.

c. Coccyx.

d. Ilium.

e. Pubis.

f. Iſchium.

FIG. 2. The Fœtal Skull.

a. Fontanelle.

b. Corronal. } Suture.

c. Sagital. } Suture.

d. Lambdoidal } Suture.

FIG. 3. The Skull to a ſmaller Scale.

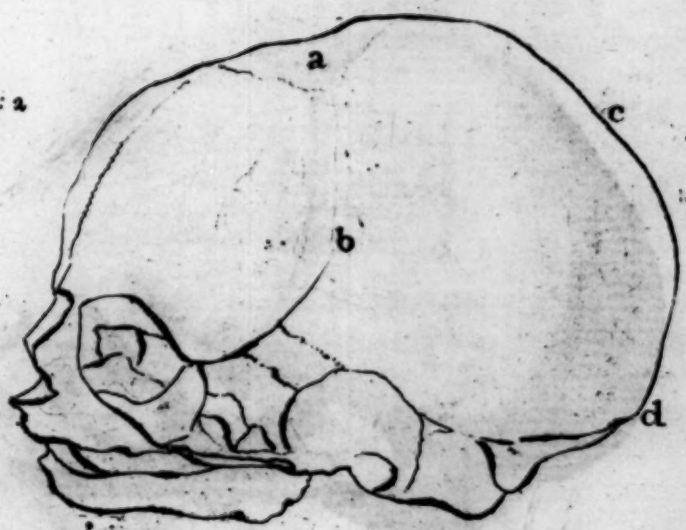
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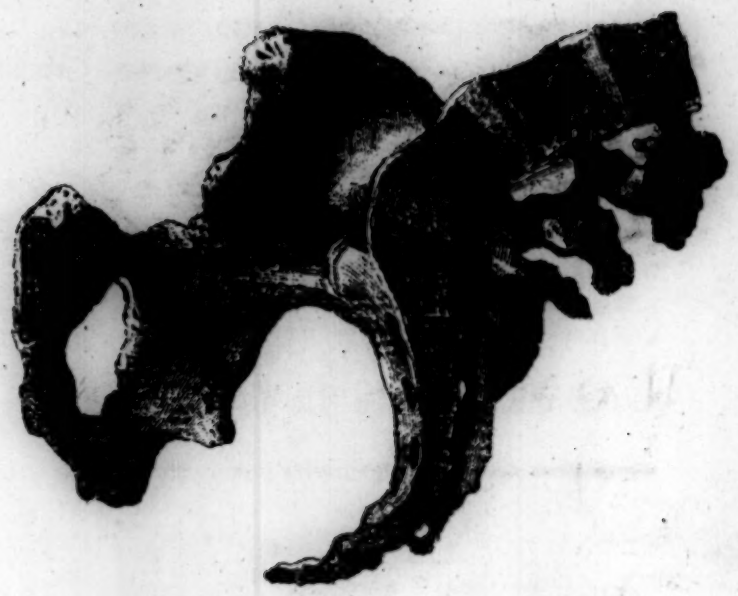
Fig: 1

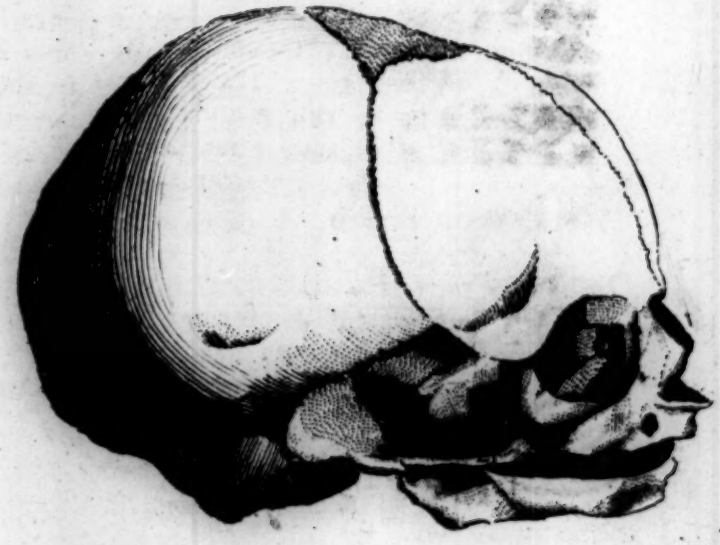


Fig: 3

Fig: 2







A COMPENDIUM, &c.

PART I.

THEORY.

SECT. I.

General Structure and Contents of the *Pelvis*.

THE human Body is divided into three principal Cavities, the *Cranium*, *Thorax*, and *Abdomen*. The inferior Part only, of this third Diviſion, is the peculiar Object of the *Accoucheur*'s Attention. This is called the *Pelvis* or *Baſſin*.

The *Pelvis* is a cylindrical Cavity, formed by the Conjunction of three capital Bones: ſome Authors divide it into the ſuperior, or large,

and the inferior, or little *Pelvis*; nor is this Diſtinction abſolutely without its Uſe. The ſuperior, or large *Pelvis*, includes the broad expanded Part of the Hip Bones; but the little, or lower *Pelvis*, properly ſo called, begins at the Ridge, or inferior Spine of thoſe Bones, and the upper Edge of the bony Arch in the Front of this lower Diviſion of the Body; this is called in the Language of Midwifery, *the Brim of the Pelvis*. The Part below may alſo be properly diſtinguiſhed, by the Terms *Cavity* and *Aperture*.

In the female *Pelvis*, are contained, the Organs of Generation proper to the Sex, as the *Vagina*, *Uterus*, *Ovaria*, and other Appendages, the *Urinary Bladder*, the *Rectum*, the Veſſels and Nerves of the Parts, the principal Blood Veſſels of the lower Extremities, ſome Portion of Muſcles, and a conſiderable Quantity of connecting cellular Membrane.

The external Parts of Generation proper to Women, conſiſt of the *Mons Veneris*, *Clitoris*, *Nymphæ*, and *Labia Pudendi*. The *Mons Veneris*, is a little Prominence on the Pubes, covered with Hair, it is formed of a fatty Subſtance under the Skin. From this Part commence the *Labia Pudendi*, which ſtretch down to within an inch or leſs of the *Anus*, at which Part is a Kind of Ligament, called the *Fourchett*, or *Frenulum Labiorum*, which bounds the lower Part of the *Foſſa magna*, as with a Bridle: the Part between which and the *Anus*, is diſtinguiſhed by the Name of *Perinæum*. The *Labiæ* are formed by a Duplicature of the Skin, lined with Fat,

Fat, and are in the Virgin State, generally thicker in the upper, than the inferior Parts. Within the upper Edges of the *Labiae*, lies the *Clitoris*, which is a ſmall ſpongy Body, with a Prepuce, bearing ſome Analogy to the male *Penis*, from this ariſe the *Nymphæ*, or *Labia interna*, and juſt below the *Clitoris*, within the Bone, is the Exit of the *Meatus Urinarius*. In the Infant, and early Virgin State, there is a ſemilunar Membrane, called the *Hymen*, expanded acroſs the lower Part of the *Foſſa magna*, which is, in the firſt Coition, or frequently ſooner, by very trivial Accidents, deſtroyed, and forms little Tubercles, called *Carunculæ Mytiformes*.

The *Foſſa magna*, in the Language of Midwifery, is called *Os externum*, in Contradiſtinction to the Orifice of the Womb itſelf, called *Os Tincæ*, or *Os Uteri internum*.

The internal Parts, are the *Vagina*, *Uterus*, *Ovaria*, and *Fallopian Tubes*. The *Vagina* runs inwards and upwards, from the *Os externum* to the *Os internum*, lying immediately under the Bladder, and upon the *Rectum*. The *Uterus*, in an unimpregnated State, is no bigger than a ſmall Pear, and ſomewhat of that Form; it conſiſts of two general Parts; the *Cervex* and *Fundus*. At the *Fundus Uteri* is a Cavity juſt big enough to contain a common Pea, (filled with a thin mucilaginous Fluid,) which communicates with the *Ovaria*, by Means of the *Fallopian Tubes*. In the natural unimpregnated State, the *Uterus* lies in the Centre, or moſt concave Part of the *Pelvis*.

In

In its united Form, the *Pelvis* may be conſidered as a ſolid cylindrical Body, ſerving to defend the ſoft Parts ſubſervient to Generation, and many others from external Injuries; to ſupport the whole Weight of the animal Machine, and give a Firmneſs and Texture to that Part of the Body, which evidently requires the greateſt Strength and Stability. Separately, it is compoſed of three principal Bones, to wit, the two *Oſſa Innominata*, and the *Sacrum*. The *Os Sacrum* has an Appendix, called *Os Coccyx*, and each *Innominatum*, tho' in the Adult State, it is but one ſolid, compact Subſtance, is, in the Infant State, compoſed of three diſtinct Parts, the *Illium*, *Iſchium*, and *Pubis*, in which State alſo, the *Os Sacrum* is diviſible into five diſtinct Bones, and the *Coccyx* into four Cartilages.

The *Os Illium* is the ſuperior broad Bone, which forms the inferior lateral Part of the *Abdomen*, and reaches about as far down, as a tranſverſe Section of one Third of the *Acetabulum*, or Socket, that receives the Head of the Thigh Bone, which Socket is compounded of nearly equal Portions of the three Bones which compoſe the *Os Innominatum*. The external Surface of this Bone, is unequally convex, the internal concave, and both are, in ſome Places, ſtrongly marked with the Origin and Inſertion of Muſcles; the Concavity is bounded below, by a ſharp Ridge, which runs from the Hind-part forwards, and being continued with a ſimilar Ridge of the *Os Pubis*, makes a Partition between the great and little *Pelvis*. This is, ſtrictly ſpeaking, the Brim of the *Pelvis*, and Boundary of the *Abdomen*.

The *Iſchium*, is of a very irregular Form, and is the loweſt Portion that contributes to the Conſtruction of the *Os Innominatum*. This Bone, may be ſubdivided into three Parts; the great Tuberoſity, (by ſome called *Os Sedentarius*,) and its two *Cruræ*. The upper bulbous Part of the poſterior *Crus* of this Bone, forms a great Portion of the *Accetabulum*, and its poſterior *Crus* riſes to near an equal Height, to meet the *Pubis*, and forms, in conjunction with that Bone, the *Foramen magnum*, thro' an Angle of which the Nerves, and Blood Veſſels of the external genital Parts, and the poſterior crural Veſſels and Nerves alſo paſs.

The Superficies of this Bone are alſo ſtrongly marked by muſcular Origins and Inſertions. From the upper thick Part of this Bone, a ſharp Proceſs ſtands out backwards, from which, ſome ſmall Muſcles ariſe, and to which, the *Sacro-ſciatic* Ligament is fixed.

The *Os Pubis* is the middle, anterior and internal Part of the *Os Innominatum*. The thick, largeſt Portion of this Bone, is employed in forming the *Accetabulum*, from which, becoming much ſmaller, it is ſtretched inward to its Fellow, on the other Side, where again it grows larger, and ſends a ſmall Branch downwards to join the ſmall Leg of the *Iſchium*.

The internal Extremity of the *Os Pubis*, is rough and unequal, which affords a firmer Adheſion for the thick ligamentous Cartilage, that forms its *Symphiſis*, and unites it to its Fellow on the oppoſite Side.

The

The *Os Sacrum*, which forms the Backpart of the *Pelvis*, is of an irregular triangular Form, broad above, narrow below, convex without, and concave within. In young Subjects it is eaſily diviſible into five Bones, united by an intervening Cartilage of conſiderable Thickneſs.

The *Sacrum* is connected to the lower Vertebra of the Loins, by Means of two oblique Proceſſes, and very ſtrong and firm Ligaments, which, with ſome others, communicate alſo, with thoſe that connect it with the *Os Illium*.

In viewing either Surface of the *Sacrum*, ſeveral Holes are to be ſeen near the Marks of Union, in the ſeparate Bones. Thro' the anterior, paſs ſome of the largeſt Nerves of the Body, and thro' the poſterior, notwithſtanding they are covered by a ſtrong membranous Expanſion, many nervous Filaments alſo are diverg'd on the external Muſcles and Integuments. The Subſtance of the *Sacrum* is very ſpongy, and having no ſolid external Plates, it is lighter in Proportion, than any other Bone of the ſame Bulk in the Body, but is ſecured from Injuries by the thick Muſcles that cover it behind, and by the ſtrong ligamentous Membranes, that cloſely adhere to it.

The *Os Coccyx* is a ſmall triangular Chain of Bones depending from the *Sacrum*: concave within, convex without, each bone diminiſhing as it deſcends, till the laſt terminates almoſt in a Point. In People of a middle Age, it conſiſts of four Pieces, in Children, very near the whole of it is Cartilage, and in old People, they are united,

united, and frequently become one Bone with the *Sacrum*.

This Bone ſerves to ſuſtain the Extremity of the *Rectum*, and is therefore, conſiderably curved inwards and forwards, by which Means it is itſelf alſo, as well as the many muſcular Fibres which ariſe from it, defended from external Injuries.

Theſe ſeveral Bones are connected together, to form the cylindrical Body, called conjunctively the *Pelvis*: laterally the *Oſſa Illia* are joined to the *Sacrum*, by an immoveable *Synchondroſſis*, which almoſt deſerves the Name of a Suture; and in old Subjects, the two Bones will ſometimes grow together.

At the anterior Part of the *Pelvis*, the *Pubes* are united by nearly the ſame Kind of Apparatus; the cartilaginous *Symphyſis* of theſe Bones, being ſtrengthened on the Inſide by a ligamentous Membrane, and outwardly by a tendinous *Apponeuroſis* from the *Abdominal Muſcles*.

It has been aſſerted, that near the End of uterine Geſtation, all theſe connecting Cartilages, and the Ligaments alſo of the *Pelvis*, are ſupled by a Mucus ſecreted by their Glands, and do actually give Way in the Time of Labour, but this cannot be poſitively proved, tho' ſometimes we have Reaſon to judge from the Symptoms, that ſomething of this Sort does really happen, as many Women are incapable of moving towards the latter End of their Time, without great Pain and Difficulty, and continue lame for

for a long While after their Delivery. In ſome Women there is indeed a Kind of obſcure Motion, in the Bones to be perceived, when the Child's Head is forced into the Paſſage by ſtrong Pains; but this does not amount to an actual Separation.

From the *Pubis* to the Spine of the *Illium*, is ſtretced a ſtrong Ligament, called *Poupartii*, this Ligament is connected to, (and appears indeed to be a part of) the Tendons of the oblique abdominal Muſcles; under this the Illiack Veſſels and Nerves deſcend to the Thigh.

From the acute Proceſs on the upper and thick Part of the *Iſchium*, riſes the *Sacro-ſciatic* Ligament, which, with ſome other Ligaments, ſtretched between the *Sacrum*, *Coccyx*, and *Innominata*, ſerve as a ſure Defence to the Sides of the *Pelvis* and protect the Sciatic Nerve, and poſterior crural Veſſels, while the contained Parts find in them, a ſoft and ſtrong Support.

Theſe Ligaments, tho' firm in their natural State, yield to the Impulſe of Pain in the Time of Labour, and expanding outwardly, as the Head of the Child is forced down upon them, contribute to the Enlargement, and more regular Figure of the *Pelvis*.

SECT.

SECT. II.

Diameters and Diſtortions of the *Pelvis*.

THREE Circumſtances are to be remembered, and principally regarded in the Conſideration of the *Pelvis*; to wit, the Diameter of its Brim, the Width, Depth, and Form of its Cavity, and the Diameter of its Aperture. We ſhould remember alſo, that to anſwer the Purpoſes of Generation, the *Pelvis* of a Woman is, at the Brim, conſiderably wider than that of a Man; the upper Part of the Illia, are more expanded, to ſupport the *Uterus*, in the Time of Geſtation, the *Sacrum* is more concave, the *Coccyx* more flexible, and the *Oſſa Pubes* ſomewhat larger and more hollowed.

The Brim of a well-formed *Pelvis*, exhibits an irregular Appearance, ſomewhat between a Circle, an Oval, and a Triangle. Conſidering it as an Oval, the longeſt Axis runs from Side to Side; as a Triangle, the poſterior Part forms one Side, and the *Os Pubis* conſtitutes the Angle or terminating Point of the other two Sides. But whether we conſider it as a Triangle, or an Oval, we muſt not loſe Sight of the Manner in which its Diameter is affected by the Intruſion of the laſt Vertebra of the Loins,

and the Width, from the lower Edge of the *Pubes*, to the Point of the *Coccyx*, when that Bone is puſhed back by the Protruſion of the Child's Head, is five Inches and a Quarter,

The Depth of the *Pelvis*, from the upper Edge of the *Sacrum*, to the Point of the *Coccyx*, in a ſtrait Line, is about five Inches, but will meaſure at leaſt an Inch more when the Point of the *Coccyx* is puſhed outwards and backwards by the Protruſion of the Child's Head. At the Sides from the Brim (towards the Forepart,) to the Bottom of the *Iſchia*, the Depth is four Inches; the Depth of the *Pubes*, from the upper to the lower Edge, where they join, is but two Inches, ſo that, in the Dimenſions of the *Pelvis* this Way, the Sides are twice, and the Back is three Times the Depth of the Forepart.

The Shape of the Inſide or Cavity of the *Pelvis*, muſt be particularly attended to and remembered, as well as the foregoing different Dimenſions. The *Sacrum* and *Coccyx*, being convex on the Outſide, exhibit within, a concave Appearance, the Curve towards the lower End, being increaſed. From the upper Part of the Brim on each Side, eſpecially near the Front of the *Pelvis*, to the lower Edge of the *Iſchia*, the Deſcent is perpendicular, and the Spaces between the *Sacrum* and Sides of the *Iſchia*, are filled up by a Quantity of Veſſels, Nerves and Muſcular Fibres, ſupported and connected by the Ligaments before mentioned, which, on the Preſſure of the Child's Head, in Labour, recede

with

with the *Coccyx*, and form externally, a round and uniform Tumour; ſo that at theſe Times, the Sides and Backpart of the Baſin are formed into an equal concave Shape, in Proportion to the Curviture of the *Sacrum* and *Coccyx*. From the upper to the lower Part of the *Pubes* alſo, the Deſcent is perpendicular, or rather a little inclining backwards.

But theſe Figures and Proportions are differently varied in different Women; for in ſome Subjects the *Pelvis* is much diſtorted, which Deformities will always occaſion great Difficulty and Danger in the Time of Labour.

The Intruſion of the lower *Vertebræ* of the Loins, and firſt of the *Sacrum*, Conſtitutes the more frequent Species of Diſtortion of the *Pelvis*, and is ſometimes ſo great, as to reduce that Diameter of the Baſin, to the Space only of two or three Inches, and there have been Inſtances of its being reduced even to an Inch and a Half.

Sometimes the *Coccyx* is preſſed inwards to the Middle of the Cavity of the *Pelvis*; this however, if its Articulation with the *Sacrum* is not oſſified, or become very rigid, is an Inconvenience, which may, by a little judicious Aſſiſtance in the Time of Labour, be partly remedied; but will be of more Conſequence, when complicated with ſuch a Mal-conformation of the *Sacrum*, as deſtroys the Concavity of its Shape, and (which frequently happens) with the Intruſion alſo above recited.

In

In ſome Women, the lower *Vertebræ* of the Loins, and Beginning of the *Sacrum*, protrude inwards and to one Side; ſometimes the *Pubes* will be convex inſtead of concave on the Inſide; and ſometimes, the Tuberoſities of the *Iſchia* will be ſo inwardly contracted towards each other, that the Space between them will be reduced to little more than Half what it ought to be, and in ſome Caſes, it will not be quite ſo much.

The *Vertebræ* of the *Sacrum* are ſometimes alſo, from Preſſure, while in a ſoft and yielding State, ſo increaſed and protruded inwards, as in a Manner to ride one another, and almoſt reduce the Concavity of that Bone, to nearly a ſtrait Line. The Sides of the *Pelvis* are equally ſubject to Compreſſion and Diſtortion in a diſeaſed State, and may be ſo deformed, as that the *Pubes* may make the Point of an acute Angle.

But the Species of Diſtortion moſt commonly met with, is that firſt mentioned, where, by the Intruſion of the lower *Vertebræ* of the Loins, and upper Portion of the *Sacrum*, the *Pelvis* is rendered ſtrait and incommodious, and on that Part, the Head of the Child generally ſticks, in a laborious Parturition.

SECT.

SECT III.

The Fœtal Skull.

THE Head is compounded of ſeveral bony Pieces, one Series of which, by their Connection, form an oval Cavity, called the Skull, the other Series are more complicated, and ſupporting the anterior Part of the Skull, compoſe the Bones of the Face; theſe alſo form a Kind of oval, ſo that the whole Head exhibits a ſpheroidal Figure, compoſed, as it were, of two Ovals, a little depreſſed on each Side; one of theſe is ſuperior, pointing forward and backward, the other anterior, pointing upward and downward, in ſuch a Manner, that in fact, one Extremity of each Oval meets, and is loſt in the other, at the Forehead. Sideways the Head repreſents a ſpheroidal Triangle, and we muſt obſerve, that the Oval of the Skull is broader behind than before, and that of the Face, broader above than below.

The *Cranium* is compoſed of eight Bones, ſix of which are proper, as the *Os Frontis*, the two *Oſſa Temporum*, the *Oſſa Parietaliæ*, and the *Os Occipitis*, and two common to the Skull and Face, to wit, the *Os Ethmoides*, and the *Os Sphenoides*.

The

The whole Forepart of the Vault is formed by the *Os Frontis*, the Sides by the *Parietaliæ* on the upper Part, on the lower by the *Oſſa Temporum*, and the *Os Occipitis* forms the whole under Part, and ſome of the Baſe. The *Os Ethmoides* is placed in the Forepart and the *Sphenoides* in the Middle of the Baſe. Theſe Bones are joined to each other, by the *Coronal*, *Lambdoidal*, *Sagittal*, and two *ſquamous Sutures*.

The *Coronal* Suture begins near to the external Canthus, or Angle of one Eye, and is extended over the Head to the ſame Point on the oppoſite Side. The *Lambdoidal* begins ſome Way below and further back, than the Vertex or Crown of the Head, whence it deſcends obliquely downwards to the Baſis of the Skull.

The Sagital Suture is placed longitudinally in the Centre of the ſuperior Part of the Skull, commonly terminating at the Middle of the *Coronal*, and *Lambdoidal Sutures*. The *ſquamous* Agglutinations, or falſe Sutures, unite the *Oſſa Temporum* with the inferior Edge of the *Parietaliæ*, where the Bones are lapped over one another.

In the fœtal State, theſe Sutures are not completely formed, the Bones being abſolutely in a State of Separation, connected only by a ſtrong but delicate Membrane; on the Top of the *Cranium*, where the *Sagittal* and *Coronal* Sutures meet or croſs each other, there is a conſiderable Space, called the *Fontanelle*, or Mould of

of the Head, the Diameter of which is extremely variable.

This membranous Connection of the fœtal Skull, allows the component Parts to lap over one another in the Birth, and enables it to conform itself, in ſome Meaſure, to the Paſſage it is to paſs through; but in ſome Inſtances, it is more oſſified than in others, and Difficulties will conſequently ariſe therefrom in Time of Labour.

The Skull of a Child that is born by the Force of natural Pains only, and has ſuffered no Alteration in Point of Shape, from any Circumſtances ariſing in the Labour, (which will ſometimes happen) is commonly one Inch leſs meaſuring from Ear to Ear, than from the Forehead to the Occiput, the longeſt Axis being about four Inches and three Quarters, and the ſhorteſt about three Inches and three Quarters, ſo that in each Diameter, there it, in a due Proportion of all the Parts, only about Half an Inch for the Bulk of the contained and ſurrounding Membranes, Viſcera and Integuments. This Calculation, however, is by no Means invariable.

In the moſt natural Kind of Labour, that Part of the Child's Head preſents, from whence the Hair diverges or goes off from all Sides; this Point is called the *Vertex*, or Crown of the Head, and in many laborious Caſes, the Head, in paſſing, by the Force of Pains thro' a narrow *Pelvis*, will be moulded into a conical or Sugar-loaf Form, the *Vertex* making the Apex,

or Point of the Cone; the membranous Connections for the future Sutures, allowing the Bones to give Way, and yield to any forcible Preſſure.

This then being the Part that firſt preſents itſelf, we may readily conceive, that the Face being (as it generally is) turned upwards, *i. e.* to the Child's Cheſt, and the Bones of the *Cranium* yielding to Preſſure, and protruded by the Force of Pains, the Orifice of the Womb, and the external Orifice alſo, are gradually dilated, till the Child finds a Paſſage into the World.

The longeſt Axis of the Head is, at the Beginning of Labour, turned to the wideſt Axis of the *Pelvis*, *i. e.* one Ear to the *Pubes*, the other to the *Sacrum*, but when it is protruded below the Edge of the *Pubes*, that being ſo much ſhallower than the Sides, or Back-part of the *Pelvis*, the hind Head riſes, by a Kind of half Turn, from below that Bone, the Forehead ſinks into the Hollow of the *Sacrum*, ſo that then, the longeſt Axis of the Head is again turned to the wideſt Axis of the *Pelvis*, the *Os Coccyx* being at every Pain puſhed back by the Head, which may then, by a little Aſſiſtance, be readily relieved, and the Body be delivered immediately after.

SECT.

SECT. IV.

General Obſervations on the Structure, with Views of the *Pelvis*, and *fœtal* Skull.

I. THE *Pelvis* is a cylindrical Body, formed by the Conjunction of three capital Bones, viz. the *Sacrum*, and two *Oſſa Innominata*. The *Sacrum* has an Appendix, the *Os Coccyx*, and each *Innominatum* is diviſible into three Portions; *Ilium*, *Iſchium*, *Pubis*.

II. Theſe Bones are connected by very ſtrong Ligaments and Cartilaginous Agglutinations indented into each other, therefore not capable of diſunion or of any conſiderable Relaxation, but from Diſeaſe or Violence.

III. The Cartilages which unite the *Sacrum* and *Oſſa Innominata*, are ſo thin, that the Bones ſeem in fact to be glued together, and on either Side behind this Union, there is a conſiderable Cavity filled up with Ligaments, which, tho' ſhort, are very ſtrong, and the Junction by them is conſequently much firmer than that by the Cartilage.

IV. At the Symphiſis of the *Pubes*, on the Inſide of the *Pelvis*, the connecting Cartilage is very

very thin, the Bones being almoſt in Contact; outwardly it is much thicker, and the ligamentous Membranes that ſurround the Bone, are extremely ſtrong.

V. And therefore, notwithſtanding what has been advanced by ſome Authors, on the Relaxation of the connecting Cartilages and Ligaments of the *Pelvis*, we are not to expect any Aſſiſtance from that Effect in the Time of Labour; a great deal however, may be expected from an Alteration of Shape in the fœtal Skull, which being ſo conſtructed as to admit of great Compreſſion without Injury, will accommodate itſelf to the Paſſage it is to paſs through. We muſt remember, however, that it will admit of greater and more advantageous Compreſſion from Side to Side, than from the fore to the hind Head.

VI. In whatever Point of View we ſurvey it, the Head of an Infant will appear of an oval Shape, but as the Diameter of the *Fontanelle* and Openneſs of the Sutures, are in different Subjects differently varied, it will not always be equally adapted to admit of that Compreſſion which is ſometimes neceſſary.

VII. A ſolid reſiſting Body cannot paſs thro' a cylindrical Body unleſs the Bulk and Diameter of the one, be exactly adapted to the Capacity of the other; and it is equally impoſſible, if the different Axes of the Cylinder, and of the Body to paſs thro' it, have each alike different Diameters, unleſs the moving Body have its

its longeſt Axis exactly turned to the longeſt Axis of the Cylinder alſo.

VIII. Hence it will follow, that if the Volume of the Child's Head, be diſproportionate to the Diameter of the Brim of the *Pelvis*; or if the longeſt Axis of the one, be too obliquely, or tranſverſely turned to the ſhorteſt of the other, it cannot paſs thro' without ſome Force or preternatural Aſſiſtance.

IX. It is therefore of the utmoſt Conſequence to know and remember the different Proportions and Appearances of the *Pelvis*, and that theſe Proportions are reverſed in the Brim and Aperture of the Baſin; and that the Back-part, in point of Depth, is to the Fore-part as three to one, and to the Sides, as three to two. It is neceſſary to remember alſo, that theſe Proportions will be differently varied in different Women.

X. The Circumference of the Brim of a well formed *Pelvis*, is in fact, rather more circular than oval, and this Circumference is nearly equal to one Fourth of the Height of the Subject.

XI. In a Woman of middling ſtature, the Diſtance of the Tuberoſities of the *Iſchia* from each other, and their Diſtance from the Top of the *Coccyx*, ought on each Side to meaſure four Inches, forming a Triangle of a Foot Circumference.

XII. The Capacity of the *Pelvis*, is in all Reſpects, more ſpacious than either its Brim or

Aperture

Aperture, unleſs in the latter, we include a Space beyond the Opening between the two Branches of the *Iſchia*; which Opening, is generally equal to the ſhorteſt Axis of the Brim of the *Pelvis*, being one Side of the Triangle below.

XIII. The Union of the laſt Vertebra of the Loins, with the firſt of the *Sacrum*, always makes an Intruſion, more or leſs into the Brim of the *Pelvis*, by which Intruſion, the Head of the Infant may for a long Time be retarded in its Deſcent, which Impediment, once conquered, the Birth is eaſily and happily accompliſhed.

XIV. The Brim, Capacity, and Aperture of the *Pelvis*, may be variouſly retrenched and diminiſhed, and the Labour will thence be rendered laborious and perilous, in a proportionate Degree to the Degree of Diſtortion; and the Birth of a live Child, may, from thoſe Cauſes, be rendered abſolutely impoſſible.

XV. Diſtortions of the *Pelvis*, are moſtly owing to Ricketty Affections; and therefore, all crooked Women are not equally diſtorted in thoſe Parts, for the Defect in the Spine happens ſometimes after the Bones of the lower Part of the Body have gained a Degree of Stability, and the Shape of the *Pelvis* is aſcertained. On the other Hand, many Women, who appear ſtrait and well made, may be diſtorted in the *Pelvis*, from having in their Infancy been ricketty and weak.

XVI.

XVI. All Diſtortions, in ſome Degree, diminiſh the Depth of the *Pelvis*, and retrench or deſtroy the Form of its Cavity. No Judgement can be formed of the Dimenſions of the *Pelvis*, by examining at the *Pubis*, unleſs the Diſtortion be ſo great as to form an acute Angle at their *Symphiſis*, the Head of the Child, being of Conſequence, at a Diſtance from it. But if on paſſing the Finger within the *Coccyx*, we readily feel the Vertebræ of the *Sacrum*, we may conclude the *Pelvis* is narrow, and if the Intruſion be very conſiderable, and obſtructs the Paſſage of the Finger, there is no Doubt of its being much diſtorted.

XVII. Women who have the Appearance of having been ricketty in their Infancy, may be always ſuſpected to be more or leſs deformed in the *Pelvis*, and the more this Appearance is diſplayed in the lower Extremities, the more the Baſin will be found to be affected; the ſame Prognoſtick will not however, hold good in the upper Extremities.

XVIII. The Direction in which the Spine becomes diſtorted, or the Thighs or Legs are bowed in Ricketty Children, will determine the Degree and Nature of the Diſtortion of the *Pelvis*; the Deformities of the Spine and Extremities will frequently admit of a partial, and ſometimes a total Cure; of the *Pelvis*, never.

XIX. There are notwithſtanding ſome Inſtances of deformed Women, who carry obvious Marks of the Effects of this cruel Diſtemper,

per, who from a fortunate Concurrence of natural Cauſes, have tolerable good Labours.

XX. In thoſe Subjects whoſe Deformities ariſe from any other Cauſe, the *Pelvis* has no Concern, and it is only a vulgar Error, that every Woman, apparently crooked, muſt have laborious and perilous Labours.

XXI. The Mobility of the *Coccyx*, diminiſhing as People advance in Years, is ſaid to be the Reaſon, in ſome Meaſure, why Women, who are pretty far advanced, at the Bearing of their firſt Child, have generally difficult Labours, but thoſe Difficulties more commonly depend on the Conſtriction of the *Os Tincæ*, from the general Rigidity of the Fibres.

PER-

SECT. V.

Organs of Generation.

THE *Vagina*, or Paſſage to the Womb, is a membranous Cylinder, about three or four Inches in Length, reaching from the *Labia* to the *Os internum*, compoſed of a Plexus of muſcular Fibres, and a rugoſe or wrinkled Membrane, loaded with Glands and nervous *Papillæ*; its Diameter is nearly equal to that of one of the ſmall Guts, but is capable of great Diſtention; it is longer and narrower in Maids than married Women, and becomes ſmoother and ſmoother, in Proportion to the Uſe made of it, till by frequent Coition, or the repeated Effects of Parturition, its *Rugæ* are almoſt obliterated.

The *Rugæ* are extended only from Side to Side, riſing in the Form of an Arch, and are moſt conſiderable at the anterior Part. The Orifice of the *Vagina* is contracted by a muſcular *Sphincter*, and its internal ſurface is lined with an extremely delicate villoſe Membrane.

The *Vagina* lies immediately under the Bladder and upon the *Rectum*, and is connected to

either by a reticular Membrane. The *Meatus Urinarius*, which in Women, is not above an Inch and a Half or two Inches long, lies in the anterior Part, in the Angle below the *Clitoris*; the *Anus* is at the posterior Part of the Orifice, between which is a *Septum*, composed of the Fibres of the *Sphincter*, *Ani* and *Vaginæ*, with some fat and cellular Membrane, wraped in the common Integuments; this is called the *Perinæum*, and must be carefully guarded from Laceration, to which it is exposed in the Time of Labour.

The inner, or posterior Extremity of the *Vagina*, surrounds the Orifice of the *Uterus* a little obliquely, in such a Manner, as that the upper Side of the Cylinder lies very near the Orifice, and the lower Side at a greater Distance from it, which makes the *Os Uteri* appear to advance more into the Cavity on the lower, than on the upper Part.

The *Uterus* opens into the *Vagina* by a small semicircular Fissure, in the Centre of a smooth Tubercle, which Orifice has the Name of *Os Tincæ*, from its Resemblance to the Mouth of a Tench, but in the Language of Midwifery, is more generally called *Os internum*.

The *Uterus* is divided into two Parts, its *Cervex* and *Fundus*; it is situated in the Middle of the *Pelvis*, between the Bladder and the *Rectum*, a little obliquely; that is, the *Fundus* falling back as it were, upon the *Rectum*, and the Point of the *Cervex* rising a little toward the Bladder. In an unimpregnated State, it is about

one

one Inch thick, and two broad at its *Fundus*, diminiſhing to leſs than an Inch at its *Cervex*, in the Form of a Pear, and is about three Inches long.

It has two Setts of Ligaments, the *Ligamenta lata*, and *Ligamenta rotunda*, the firſt of which, are however, no more than a Duplicature of the *Peritonæum*, which gives a Covering to this, in common with the other *Viſcera* of the *Abdomen*: They connect the Sides of the *Uterus* and upper Part of the *Vagina*, with the *Parietes* of the *Pelvis*, and ſuſtain the *Ovaria* with their Veſſels and the *Fallopian Tubes*. The *Ligamenta rotunda* ariſe from the *Fundus*, and deſcend along the Sides of the *Uterus* to the Groin, incloſed in the *Ligamenta lata*, and paſſing thro' the Rings of the oblique and tranſverſe Muſcles of the *Abdomen*, are loſt in the Fat, and common Integuments of the Thighs. This Way the Gutt paſſes in an *Hernia inteſtinalis* in Women, and hence ariſe thoſe intolerable Pains ſome Women feel in thoſe Parts towards the End of Geſtation, as they are extremely ſenſible, being compoſed of a Plexus of Veſſels and irregular nervous Fibres, envelopped and connected by a double Membrane.

The unimpregnated *Uterus* appears of a compact and ſolid Subſtance, but has a flattiſh triangular Cavity, the ſhorteſt Line whereof is at the *Fundus*, where the Angles open into very narrow Ducts, by a Perforation that will but barely admit a Hog's Briſtle, which communicates with the *Fallopian Tubes*: The lower Angle forms a flat Duct, which perforates the

Neck

Neck of the *Uterus*, lengthwiſe, and terminates at the *Os Tincæ*. The Cavity of the *Uterus* is lined by an extreme fine and delicate Membrane, which is very ſmooth at the *Fundus*, but wrinkled in a particular Manner towards the Orifice.

This Membrane is perforated, eſpecially that Portion which lines the Bottom of the *Uterus*, by a great Number of ſmall Holes, thro' which, when the whole *Uterus* is ſtrongly preſſed, ſmall Drops of Blood may be ſeen to paſs. In the *Cervex uteri*, this Membrane is divided into equilateral Portions, by two longitudinal prominent Lines, whereof the anterior one is moſt conſiderable, and on each Side of theſe, are many other tranſverſe oblique Lines, ſurrounded and intermixed with ſmall *Lacunæ*, that furniſh a viſcid Mucus to cloſe up the Orifice of the *Uterus*.

The Subſtance of the *Uterus* is muſcular, with a conſiderable Intermixture of Veſſels; in the Sides and Edges its Thickneſs is nearly equal, but it is thicker in the Middle of the *Fundus*, than towards the Angles, which open into the Tubes, near which, the Edges are alſo ſomewhat thinner than towards the Neck.

On the upper and anterior Edge of the *Ligamenta lata*, run two flaccid, verniform, and conical Canals, each of which, is by its narroweſt Extremity connected with the *Fundus uteri*, in the Manner above mentioned. From their Origin, at the Angles of the *Fundus uteri*, their Diameter encreaſes gradually, till, at their other Extremity, it is equal to one Third of an

an Inch, at which end they are bent down towards the *Ovaria*, and contracting again to a ſmall Orifice, finiſh in a Kind of membranous Fringe, called the *Fimbria*.

The Subſtance of theſe Tubes, is ſpongy intermixed with Veſſels and fleſhy Fibres, running in different Directions, and a connecting cellular Subſtance: their Cavity is lined with a very delicate Membrane, laying in longitudinal Folds, and, like the *Uterus* itſelf, is lubricated, by a Mucus, continually ſecreted and renewed by the Glands of the Part.

The *Ovaria* are ſituated at the Sides of the *Uterus*, on the poſterior Part of the *Ligamenta lata*, a little below the *Fimbria* of the *Fallopian Tubes*; they are whitiſh, flat, oblong, or rather oval Bodies, containing ſeveral little Balls, or tranſparent *Veſſiculæ*, called *Ova*, ſurrounded by a compact ſpongy Subſtance, which forms for each a diſtinct Chalice, and gives to each a diſtinct Covering. They are connected to the *Fundus uteri* by two ſhort, round Ligaments, included alſo in the Duplicature of the *Peritonæum*. In Women in their full Vigour, or of a ſanguine Habit, the *Ovaria* are pretty large; in thoſe who have had Children, they will be ſhrivelled and waſted, and carry the Marks of Cicatrices.

The *Uterus*, and all theſe its Appendages, are furniſhed with Blood Veſſels of three Kinds, to wit, Spermatic, from the *Aorta*, and *Vena Cava*; Hypogaſtric, which are very conſiderable, and Branches from the Hæmorrhoidal; which, in

in a ſurpriſing Manner, communicate with one another. The Veins of the *Uterus* have no Valves, and are larger in Proportion, (eſpecially in a pregnant State) than the Arteries. The arterial and venal Syſtem are equally tortous, and in the Time of Geſtation, the Veins are many of them dilated into Sinuſes. The capillary Branches of theſe Veſſels open into the *Uterus* and *Vagina*, and furniſh the menſtrual Diſcharges.

The uterine Nerves are furniſhed from the *Intercoſtals*, and thoſe of the *Os Sacrum*, and the *Sympathetici maximi*; hence we may account for many painful Circumſtances, in the Courſe of Geſtation, and Time of Labour; And beſides all theſe, there are a Series of Lymphatic Veſſels, diſperſed through all the membranous Connections of the uterine Appendages.

SECT.

SECT. VI.

The *Catamenia* and Theory of Conception.

THE *Catamenia* is a Phœnomenon that has exercised the Talents and employed the Pens of the most distinguished Professors of the Medical Art. It is on all Hands generally allowed, (and indeed this is the only Point, in which the various Authors who have endeavoured to explain this inexplicable Theme, are agreed) that the Necessity of some extraordinary Supply, to answer the Expence of vital Nourishment, and support them under it, in the Time of Gestation; is the final Reason, why this Redundancy at other Times, was given to the female Sex.

Doctor *Friend*, who has written a very ingenious and elaborate Treatise upon this Subject, and Doctor *Bohn*, maintain, that this Flux is the Result of a mere *Plethora*, and to be evacuated only for Relief against the Quantity. Others, as *Dr. Charlton*, *Bale*, *De Graaf*, and *Drake*, maintain, this Evacuation, to be the Effect of an Effervescence or Ebullition of the Blood. In both these Theories, the old Opinion of the Malignity of this Discharge is exploded; and indeed, the only rational Argument brought in Support of that Opinion; the Pain

it

it occaſions in ſome Women, may be in a more ſatisfactory Manner accounted for, from other Cauſes.

Doctor *Friend* ſuppoſes the *Plethora* to ariſe from a Coacervation in the Blood Veſſels of a Superfluity of Aliment, remaining in the Conſtitution, over and above what is excreted by the ordinary Ways, and that Women have this *Plethora* and not Men, becauſe their Bodies are more humid, their Veſſels more lax and ſlender, and their Manner of living is more inactive; from which Cauſes, their Perſpiration being leſs, an Overplus will be retained in the Veſſels, till it be accumulated in ſuch Quantity, as to diſtend them, and force its Way, thro' the capillary Arteries of the *Uterus*, which Part, from the Structure of its Veſſels, having a conſiderable Quantity of Blood, continually circulating through it, and being ſo ſituated, as to be incommoded by no Preſſure, the Arteries being very numerous, and the Veins ſinous and winding, therefore more apt to retard the Impetus of the Blood, and conſequently, in a plethoric Caſe, to occaſion a Rupture of the Veſſels, which will keep diſcharging till they are unloaded, and can recover their Tone.

Boerhaave, from the Capacity of the *Pelvis*, and other Circumſtances peculiar to the Sex, ſupports his Reaſons why Women have the Menſes and not Men. He obſerves alſo, that the Blood Veſſels, Lymphatics, adipoſe and nervous Syſtem, with the Membranes and Fibres in general, are much laxer in Women than in Men, whence all their Cells, Veſſels and Cavities

Cavities are more eaſily repleniſhed, and the Humours aggregated in them: that they perſpire leſs than Men, and arrive ſooner at their Maturity, or Extent of Increaſe; to which he alſo adds, the Conſideration of the looſe and pulpous Texture of the *Uterus*, and the many Veſſels it contains. According to this Syſtem, the Menſes ſhould not appear till the Body (or at leaſt thoſe Parts) ceaſed to grow, which Experience convinces us is not the Caſe.

Dr. *Drake*, and others with him, maintain, that there is no ſuch Repletion, or at leaſt, that it is not neceſſary to Menſtruation, urging, that if the Menſes were owing to a Plethora, ſo accumulated, the Symptoms would ariſe gradually, and a Heavineſs and Inactivity be felt, long before the Period were compleated, and the Symptoms ariſe and encreaſe daily, after every Evacuation, which is alſo contrary to Experience.

Againſt this Syſtem (of a Plethora,) which however, it muſt be owned, is the moſt rational and conſiſtent that has yet appeared, many other Objections are ſtarted alſo by thoſe, who adhere to the Doctrine of Fermentation, yet their Arguments, are neither ſo deciſive or ſatisfactory. *De Graaf* has left it, as a Matter indiſputably granted, the Reaſons whereof are inſcrutable; nor will any of the Arguments in Support of this laſt Hypotheſis, bear an equal Scrutiny with thoſe advanced by Dr. *Friend*.

By whatever Means the Effect is produced, we know that the Females of the human Species,

when they attain a certain Age, have every Month a periodical Evacuation of Blood, from the *Uterus* and *Vagina*; and that thoſe who have not thoſe regular Evacuations, are not healthy: we know alſo, that thoſe Women who have them not, are generally barren.

Nor is the Theory of Conception more clear, or leſs perplexing than the former. Authors have been very copious on this Head alſo, to very little Purpoſe. After a Thouſand Experiments, the Conjectures, Probabilities, and Hypotheſes of different Authors, on the Generation of the Fœtus, have been hitherto, too defective to build any ſatisfactory Syſtem upon: and the moſt accurate Obſervations, of Anatomiſts and Philoſophers, have hitherto done no more, than lead into a Labyrinth, to the Extremity of which, no one has yet been able to direct his Steps.

It is agreed on all Hands, that there are in the *Ovaria* of Women, little Eggs; theſe have, till very lately, been maintaind to be the Formal, and material Rudiments of the future Man, which the Seed of the Male only vivified and impregnated; but that the Ovum in itſelf, before Impregnation, did actually contain thoſe Rudiments, tho' they could not generate, till rendered prolific by the Seed of the Male.

This Opinion was firſt laid down, with great Strength of Argument, by the juſtly celebrated Dr. *Hervey*, and from his Authority, procured almoſt univerſal Aſſent, and ſeemed perfectly eſtabliſhed by *De Graaf*, till *Lewenhoek* put forth his

his microſcopical Obſervations, grafting ſomething upon, and taking at the ſame Time, ſomething from it.

This ingenious Naturaliſt, pretends by his Microſcopes, to have diſcovered in the Semen maſculinum of ſundry Animals, innumerable minute Animalculi, moving with great Vigour and Celerity in the Fluid. Theſe he maintains to be Animals in Effect, of that Species the Semen is taken from. His Obſervations have excited the Curioſity of many learned and ingenious Men, who generally agree with him, in the Diſcovery of theſe Animalculi, which they compare to Tadpoles.

A new Theory of Generation has been built upon this Diſcovery, and the Animalculum is now ſuppoſed to be the intire Fœtus, and the Ovum of the Female, only created as a Matrix, which affords a Pabulum for the Embryo. The Exiſtence of the Ova, in all viviperous Females, notwithſtanding this Diſcovery, being inconteſtible.

Both theſe Hypotheſes, are equally plauſible, and equally obnoxious to difficulties and objections, as neither of them will fully account for mixed Generation.

If the Ovum contained the formed Animal, the Fœtus ought to follow the Species of the Mother, becauſe the Sire contributes nothing but a Vis Vitæ, or Power of Vegetation, the Animal being determined beforehand. Againſt the Animalculi, this Objection is yet ſtronger,

becauſe

becauſe, according to that Hypotheſis, the Species is not only already determined, but the Creature actually formed and living: but not only this Circumſtance, but the Similitude alſo, which Children bear to their Parents, ſhews, that towards the Determination of the Species, and even the Compoſition of the Fœtus, both Sexes concur, and that ſometimes one may prevail, and ſometimes the other.

Nor is it impoſſible that the Glaſſes may deceive us in this Particular, as it is more than probable, that theſe little apparent animals, may be only ſome larger Particles of a mixed Fluid, whoſe Motion and different Figure the Microſcope diſcovers to our Eye, while the minuter Parts are not diſcoverable even that Way. Thro' the whole Creation we ſee nothing ſuperfluous, and Nature is too good an Œconomiſt, in all her Works, to have created ſuch a Number of Beings to periſh, as muſt have been the Caſe, were this Doctrine literally true.

It is, however, very unphiloſophical, to brand any Theory with the Character of Error, without advancing more probable Syſtems, to corroborate our Cenſure. Hitherto there has been no ſuch ſatisfactory Syſtem advanced by thoſe, who have caviled at the two principal ones above recited. natural Experience convinces the moſt Ignorant, that the common Intercourſe of the Sexes, produces the Propagation of the Species, and that it cannot be produced by any other Means; but the moſt abſtruſe Philoſophy, the moſt abſtracted Reaſoning, and deepeſt Penetration of Study, never could yet, and perhaps never

never will aſcertain the diſtinct Modus, or Manner of the operation, that informs and actuates, the productive Cauſes.

Whether the Animal, or the Vis Vitæ, exiſts in the Semen of the Male, or in the Ovum of the Female, certain it is, no Impregnation can be produced, but by the Concurrence of the generative Faculties in either Sex, which Concurrence is univerſally allowed to be produced in the following Manner.

The Friction of the *Penis*, and its Efforts againſt the *Os Tincæ* ſets all the uterine Appendages in Motion, and excites an Erection in the Fallopian Tubes, the detached Extremities of which, are thereby brought in Contact with the *Ovaria*, from whence, a ripe Ovum is abſorb'd and impregnated by the Male Semen, conveyed thither by the Tube which receives it from the *Uterus*, by the ſmall Aperture at its *Fundus*, and re-conveys it, thus united with the *Ovum*, to the *Uterus*, to be properly maturated.

That this is the Proceſs of Impregnation, is almoſt inconteſtibly prov'd, from the Circumſtances of *Extra-uterine Conceptions*, and from the Diſſections of executed Bodies, and common Women, in whoſe Tubes the male Semen has been found.

When the *Uterus* is once impregnated, the Tubes are thought to loſe their Power of Erection, and to grow flaccid, and as it diſtends, their

their Fimbria are removed to ſome Diſtance from the *Ovaria*.

Hence may be deduced, ſome probable Cauſes of Sterility;—if the *Os uteri* is ſo cloſed as to reſiſt the Admiſſion of the male Semen;—if the Orifice, which opens from either Angle of the *Fundus uteri* into the Fallopian Tubes, be impervious or obſtructed;——if both or either of the Tubes ſhould from Inflammation, or any other Cauſe, be in any Part contracted, or totally collapſed;——or in fine,——if by an Accumulation of Fat, or any harder Subſtance near the *Ovaria*, or near, or upon the Tubes themſelves, their Extremities ſhould be kept from embracing the *Ovaria*, ſo as to receive the Ovum, or communicate to it the impregnating Matter of the Male.

SECT. VII.

Signs of Conception —— Economy of the Gravid Uterus.

THE Signs of Pregnancy are all fallacious, till the Motion of the Child fixes the Criterion: When After the neceſſary Connection, a Woman miſſes the Return of her Menſes, ſhe concludes ſhe has conceived, and from that Period reckons her term of Geſtation. Sometimes the Menſes will continue to flow after Conception, but they are ſeldom ſo copious or florid as at other Times, unleſs in Floodings brought on by Accident.

Soon after Conception, a ſmall Pain is felt about the Navel, and ſome gentle Commotions in the Abdomen, which bring on a Nauſea, Reachings, and Loathings; for the firſt two Months, the Woman grows thinner and ſlenderer, the Abdomen appears depreſſed, tho' it afterwards diſtends, and grows gradually larger; the Eyes ſeem ſunk and hollow, the Breaſts begin to ſwell and grow fuller; they contain ſomething like Milk, and become hard and painful; the Nipples grow larger, firmer, and darker coloured, a livid Circle appearing round them.

Some

Some Time between the third and fifth Month, the Motion of the Fœtus will begin to be perceived, at firſt, only like the Effects of Wind, or the Fluttering of a Bird; but as it grows larger and ſtronger, the Motion of its Limbs may be diſtinguiſhed. Some Women, will faint, or be otherwiſe diſordered at the Time of *quickening*; others will not perceive in themſelves any ſenſible Alteration; what is meant by this Term, is perhaps no more, than the Eſcape of the *Uterus*, from its Confinement in the Cavity or at the Brim of the *Pelvis* into the Abdomen; as that Event, by removing a conſiderable Preſſure from the Illiac Veſſels, may occaſion the Blood to flow with a greater Impetus to the lower Extremities, and occaſion the Symptoms conſequent on ſuch a momentary Deprivation of vital Nouriſhment, from the Heart, Lungs, Brain, &c.

The Symptoms of Obſtruction will aſſume all theſe Appearances. A Day or two before the Irruption of the Menſes, moſt Women are afflicted with ſtretching Pains, in the Back, Loins, Inſide of the Thighs, Breaſts and Head, they have alſo a Sickneſs and Oppreſſion of the Stomach, and a Fulneſs of all the Viſcera of the Abdomen, all which Symptoms abate and gradually vaniſh when the Diſcharge appears. But if the Woman be obſtructed, the Complaints continue and encreaſe, and are ſcarcely diſtinguiſhable from the Symptoms of Pregnancy, till the End of the fourth or fifth Month, about which Period, Women with Child grow better, and the Symptoms of Fullneſs gradually wear off

off, whereas the obſtructed Patient, grows worſe and worſe.

A circumſcribed Tumor, or ſtretching in the Abdomen, is perceptible in the fifth or ſixth Month, occaſioned by the Diſtention of the *Uterus*, and by its Conſiſtence and Circumſcription, is eaſily diſtinguiſhed from an Aſcites, and is alſo rounder and firmer than the Tumors occaſioned by Obſtructions, which, are always accompanied with a Fullneſs of the Veſſels, belonging to the Ligaments and neighbouring Viſcera.

In the firſt three or four Months, the Symptoms are ſo equivocal, that we ought to give our Opinion with the greateſt Caution, and rather endeavour to palliate the Complaints, than give Remedies that may endanger the Fruit of the Womb; and tho' we ought not implicitly to believe all that may be urged, to fix that on a Diſeaſe, which ariſes from a natural Cauſe, we ſhould always judge on the charitable Side, where Life or Reputation is at Stake.

After the fifth or ſixth Month, the Certainty of Pregnancy is to be aſcertained by the Touch, or Examination in the *Vagina*; but here alſo, we may be deceived, if there is a Tumour of any Bulk in the *Uterus* itſelf. In this Caſe, we muſt rely on the Motion of the Child, which will ſometimes be ſo nearly imitated by Flatulencies, as to raiſe conſiderable Doubts, which Time only can effectually remove.

The Motion of the Child, will be more or leſs troubleſome according to the Degree of Diſtenſion, and Quantity of Water in the *Uterus*, and if the Child ſeems to move with Difficulty, notwithſtanding the Diſtenſion is great, eſpecially if its Motions are ſtrong and frequent, it is a Sign there are more than one *Fœtus* in the Womb, or that the Child (if ſingle) does not lie in an eaſy or advantageous Poſture.

After Conception, there is a new Production of Parts, which exiſt only during the Time of Geſtation, and are afterwards either diſcharged, or dry up and diſappear. The Principal of theſe is the *Fœtus*, (for the Uſe of which, all the reſt were formed) and the Secundines, Burthen, or After-birth, (as by the Women they are variouſly diſtinguiſhed) which conſiſt of ſeveral Parts, viz. the *Placenta*, *Membranes*, and *Funis*.

The *Embryo*, on its firſt Formation in the *Ovum*, and the *Fœtus*, during the whole Term of uterine Geſtation, is ſuſpended in a Fluid, ſurrounded by a double Membrane, the inner *Lamina* of which, is called the *Amnios*, the external one, the *Chorion*.

Some Authors are of Opinion, that the Infant is in ſome Meaſure nouriſhed and ſupported, by the Fluid whereby it is ſurrounded; which they imagine it ſucks in occaſionally: but tho' it is certain, that on opening the Bodies of ſtill born Infants, the firſt Paſſages are found full of a Fluid, ſimilar to that which ſurrounds the *Fœtus*, and the lower Inteſtines full of Fæces, and

and tho' Infants will ſometimes immediately, and always in a ſhort Time after their Birth, evacuate both by Stool and Urine, it is no more than a merely probable Hypotheſis, which is not blindly to be credited. We are certain, that the only real Support of the *Fœtus*, or at leaſt the moſt material one, is from the Circulation carried on between it and the Mother, by Means of the *Placenta*, without which Circulation, as the Infant cannot ſubſiſt, it is hardly probable, that Nature provided the Fluids for the Purpoſe of Nutrition only; and it is more probable that the chief Uſe of thoſe Waters, is to keep the *Uterus* ſo diſtended, that the *Fœtus* may have Room to move its Limbs, which would otherwiſe be much confined, and by forcing the Membranes forwards, to dilate the *Os internum* in Time of Labour.

The *Placenta* is a conſiderable, round, fleſhy, or rather vaſcular Subſtance on the Outſide of the *Chorion*, and attached to the *Uterus*; in this Situation, it is concave internally to the *Fœtus*, and convex towards the *Uterus*, to which its ſpongy, villoſe Part is connected by an extremely delicate reticular Membrane, continuous with the *Chorion*. The Diameter of the *Placenta* is about eight or nine Inches, and it is in the Centre about an Inch thick, but grows gradually thinner towards the Edges: from the Centre of its Concave, or internal Surface, which is overſpread with an infinite Number of very conſiderable Veſſels, ariſes the *Funis umbilicalis*, compoſed of two Arteries and a Vein, connected by a Continuation of the fœtal Membranes,

Membranes, which cover the internal Surface of the *Placenta*.

The Subſtance of the *Placenta* is divided into a Number of ſmaller *Lobulli*, in which the Veins and Arteries are divided into innumerable Ramifications, which ſeem to inoſculate with the menſtrual Veſſels of the *Uterus*, by which the nutritive Juices are abſorbed from the Mother, and conveyed, by the venal Ramifications to the great Vein of the *Funis*, which enters the Body of the *Fœtus* at about the Centre of the Abdomen, called the Navel. This Vein, tho' ſingle, is twice as large as the Arteries, and paſſes thro' the Liver of the *Fœtus*, where it terminates in a *Sinus* of the *Vena Portæ*, into which it diſcharges its Contents; from hence, thro' a ſingular Canal, of a cylindrical Figure, called *Canalis Venoſſus*, the greateſt Part of the Blood paſſes from this Sinus to the *Vena Cava*, and ſo to the Heart; the Remainder is diſtributed by the Branches of the *Portæ* to the Liver.

From the two Illiac Arteries, and ſometimes from the *Aorta* of the *Fœtus*, ariſe the two Arteries which, with the Vein above mentioned, compoſe the *Funis*; they run, in a Spiral Direction round the Vein and terminate by a Multitude of ſmall Ramifications, in, or upon the Surface of the Uterus; and are ſuppoſed to re-convey, the ſuperfluous Juices of the *Fœtus*, to the Mother. Theſe Veſſels, a few Days after the Infant's Birth dry and fall off, and the internal Portion of them becomes impervious, and forms a Ligament that ſuſpends the Liver.

The

The *Amnios*, is a very thin pellucid Membrane which has but few Veſſels, and thoſe, extremely ſmall, to be ſeen in it. In general it has been thought to have none, but from ſome Experiments lately made, a very delicate Syſtem of Veſſels, has been diſcovered in it. The *Chorion* is a tranſparent Membrane alſo, but much thicker than the former, and is compoſed of two *Laminæ*, the inner of which, is ſmooth and poliſhed; the exterior one, Spongy and villoſe, and is overſpread with an infinite Number of Blood-veſſels, which communicate with the *Uterus*, and are connected to each other, and to the inner *Laminæ* of the *Chorion*, by a very fine reticular Membrane, which connects alſo, the *Lobuli* of the *Placenta*, and even the veſſels themſelves, to each other; this exterior Portion, is called the falſe or ſpongy Chorion; and is thought by ſome, to be a Membrane of the *Uterus* itſelf, which is caſt off, and renewed, at every parturiton.

The *Liquor Amnii*, or Waters of the *Fœtus*; are not always, of the ſame Colour or Conſiſtence, or accumulated in equal Quantity; they are generally, clear and limpid, but ſometimes turbid and diſcoloured; in ſome Inſtances, of a thin ſlimy Nature; in others, glary and tenacious, they are ſometimes collected in a large Quantity, and ſometimes, in a very ſmall one; but however they may vary, in different ſubjects, either, in regard to Colour, Quantity, or Conſiſtence, they never become putrid, or, acquire any Degree of Acrimony except in caſes of the Infant's Death. At the Begining of Labour, they are in a Degree protruded in the Membranes before the Child, in Form of a round Bladder diſtended with Water and

by-

by their Protruſion, gradually dilate the *Os uteri*. In the moſt natural Kind of Labour, this Bladder ſhould not burſt, till it has dilated the *Os externum* alſo, and the Child's Head, is advanced, to the lower Edge of the *Pubes*. it will ſometimes however, be broken, at the firſt Effort of Nature, to exclude the Child; and the Waters, will keep dribling away for a great many Hours, before the Pains acquire Force enough to accompliſh the Delivery. When the *Fœtus* is in a wrong Poſition, the Membranes will be protruded in the Form of a long Gut, or ſometimes in the uſual globular Manner, but contracted above, the *Os uteri* being but very little dilated.

There is frequently a Collection of Water between the *Laminæ* of the *Chorion*, or between that Membrane and the *Amnios*; ſometimes in both theſe Interſtices.——When it happens between the *Laminæ* of the *Chorion*, the outer Membrane, being extremely thin and delicate, will generally diſcharge its Contents, ſome Time before the real Labour comes on; in this Caſe, there is ſeldom much Pain, till the Waters which immediately ſurround the *Fœtus*, have protruded and perhaps burſt the ſecond Membrane.

There is alſo great Variety in the Bulk of the *Placenta*: and in the Length and Thickneſs of the *Funis*, which will be ſometimes alſo loaded with Hydatides, its moſt common Thickneſs, is nearly equal to a moderate Finger, its Length about Half, or three Quarters of a Yard, and it is frequently entangled about the Limbs, or round the Neck of the *Fœtus*.

When

When there are two or more Children, each have their ſeparate *Placenta*, ſometimes adhering to different Parts of the *Uterus*, but moſt commonly to the ſame, and ſo intimately connected with each other, as to be inſeparable without Violence, tho' each *Fœtus* has its diſtinct Membranes and *Funis*.

The *Placenta* does not always adhere to the ſame Region: its moſt natural, and perhaps moſt frequent Attachment, is to the *Fundus uteri*, but it is ſometimes attached to the Sides, and there have been Inſtances of its adhering cloſe to, and even over the *Os internum*. In this Caſe, the Woman will be ſubject to frequent Floodings, and will ſeldom carry her Burthen to its proper Period.

SECT.

SECT. VIII.

Of the *Fœtus* in *Utero*.——The Diſtention of the gravid *Uterus*, &c.

THE *Fœtus* in *Utero*, is of an oval Form, its Head hangs down, with its Chin upon its Breaſt, its Back is round, and its Knees are drawn up to its Belly; with its Hands it embraces its Knees, and its Heels are bent back to its Breech. Whatever Nouriſhment it may receive, from the *Liquor Amnii*, Experience proves, that its moſt material Support is from the Circulation carried on between it and the Mother, by Means of the *Funis* and *Placenta*, ſince we know that whatever impedes the Circulation in the one, or detaches the other from the *Uterus*, endangers its Life.

That all its ſecretory Functions are regularly and duly performed, will not perhaps bear a Doubt; but that it has any Excretions cannot be abſolutely proved; nor would the Proof be indeed of any Conſequence.

From the Moment of Conception, to the Commencement of Labour, the *Uterus* may be conſidered as ſubject to the Power of Diſtention, from the Increaſe of its Contents. When the impregnated

impregnated *Ovum* firſt falls into the *Uterus*, it is not much larger than the Seed of a Poppy, but in a very ſhort Time encreaſes in Bulk; till it comes in Contact with the whole internal Surface of the *Fundus uteri*, which then gradually begins to ſtretch, and in the Space of three Months, the whole *Fundus*, and about one Fourth of the *Cervex uteri*, will be conſiderably diſtended; the *Uterus* will riſe above the Brim of the *Pelvis*, and the Tumor in the *Abdomen* begin to appear; at the fifth Month, the *Uterus* riſes up as high as the middle Space, between the *Pubes* and the Navel; by which Time, one Half of the Neck is equally diſtended with the *Fundus uteri*. By the ſeventh Month, the *Fundus* riſes as high as the Navel, and by the ninth ſolar Month, from the Conception, it riſes to within a ſmall Space of the lower Point of the Breaſt Bone, and the Neck is then wholly diſtended with the *Fundus*, in a globular Form.

All this Diſtention, from the tortous Direction of the uterine Veſſels, is effected, without denuding the Coats of that Viſcus, or making them (unleſs at the *Fundus*) any thinner, than in its natural unimpregnated State; the Diameters of the Veſſels alſo, being increaſed by the Impetus, and Quantity of Blood. Nor do the Ligaments ſuffer any material Inconvenience, or Degree of Diſtention, till towards the latter End of Geſtation; the *Ligamenta rotunda*, being tortous, like the Veſſels; and the *Ligamenta lata*, lying looſe, and flaccid in the *Pelvis*, will allow the *Uterus* to riſe to a conſiderable Height, before either of them ſuffer any Diſtention.

Notwithſtanding the impregnated *Ovum* is ſo ſmall, at its firſt paſſing thro' the fallopian Tubes into the *Fundus uteri*, it ſoon increaſes ſo as to come in Contact with the whole internal Surface of that Cavity, and forms the proper Adheſion, to ſecure its Support and Nouriſhment.

It is generally believed that the Vein and Artery, which faſtened the *Ovum* in its Chalice before Impregnation, and are broken off, when it is impregnated and received into the fallopian Tubes, form the *Funis*, and firſt Rudiments of the *Placenta*, which, in a ſhort Time after the *Ovum* falls into the *Uterus*, appears upon its Surface like a ſmall Film or Cloud.

Till the Parts are all diſtinctly unfolded, the Impregnation bears the Name of Embryo only. The firſt Part to be diſcovered as forming, is the Spine, and next the Cerrebrum and Cerebellum, appear like two ſmall Bladders, and the Eyes next become viſible, and prominent; then the *Punctum ſaliens* may be diſcovered, and the Extremities laſt of all unfold themſelves; this will be at about the third Month, from which Time to its Expulſion, it is properly a *Fœtus*.

The *Fœtus* is generally deſcribed in regard to its Situation and Poſture in the *Uterus*, as ſitting, as it were, ſuſpended in the Waters, with its Breech againſt the Spine, and its Head bent forwards towards the Mother's Belly; about the ſeventh Month, we are told by *Kiel*, and ſome other Writers, the Head grows ſpecifically

ſically heavier than the reſt of the Body, and falls down to the *Os uteri*, its Back turning to the Belly of the Mother, and the Head reſting on, or ſometimes below the Brim of the *Pelvis*, which, when in the moſt advantageous Poſture, will lie with one Ear to the *Pubes*, the other to the *Sacrum*, the Forehead on the left, and the *Occiput* on the right *Ilium*.

It is not certain however, that the *Fœtus* does really make this Turn, as it is moſt commonly the Head which preſents at the *Os internum*, even in the earlieſt Miſcarriages, and premature Labours: The Head of the *Fœtus* is in the earlieſt Months, ſpecifically heavier than the Body, therefore the Turn cannot be effected by that Cauſe, unleſs at an earlier Period than the ſeventh Month.

And yet it is almoſt inconteſtible, that the *Fœtus* does ſometimes turn in this Manner, there being no other Way of accounting for ſome Accidents to which the *Funis* is ſubject, which will ſometimes be found to have a perfect Knot upon it, and is very often twiſted once twice, or three Times round the Infant's Neck or Extremities; yet that the ſpecific Gravity of the Head does not always occaſion it to preponderate in the *Uterus*, is clear, from the Number of breech and footling Caſes that occur, where the Head is not only heavier, but larger, in Proportion than the Body. From what Cauſe a *Fœtus* preſe ts itſelf out of the moſt commodious and natural Way, no one has yet attempted to decide, nor would the perfect Knowledge of thoſe Cauſes avail us much,

much, since it it sufficient for the Purpose of the Accoucheur, to know what is to be done, and how to do it readily, when he finds a Labour so circumstanced.

From the first to the last Moment of Gestation, the Distention of the *Uterus* is uniform and gradual, the *Fœtus*, the Membranes, and the *Fumi* are continually growing, till the Elasticity of the uterine Vessels and Fibres, resist their further Accretion; but the *Placenta* arrives at its full Bulk, most commonly by the sixth or seventh Month.

SECT. IX.

Twins, Superfœtations, False Conceptions, and Moles.

WHEN there are two, or more Children in the Womb, each have their ſeparate Membranes, Waters, and Placenta; and tho' the Placentæ, are in this Caſe, frequently ſo connected, as to form in Appearance, but one Maſs, they are in Effect two diſtinct Cakes, notwithſtanding the larger Veſſels, eſpecially on its Surface, ſeemingly unite together. They are however ſometimes found in two diſtinct Portions, and adhering to different Parts of the *Uterus*; but whether the Placentæ adhere to each other or not, the Membranes are diſtinct, and each *Fœtus* has a Fluid proper to itſelf alone. Wherever Nature deviates from this Rule, the Effect, is the Production of a miſhapen Body, which, in the Language of Midwifery, is termed a Monſter.

When the Placentæ are connected with each other the Chorion is frequently, if not always, according to *Leverett*, common to both, tho' each have their ſeparate and diſtinct Amnios and Waters; and if we allow the falſe or ſpongy Chorion to be really a Membrane, furniſhed by

by the *Uterus* itſelf, it will appear, in the Eye of Reaſon, a ſelf-evident Fact; yet that the inner Laminæ of the Chorion, at leaſt does on all Sides ſurround the Amnios, is hardly to be doubted, the Septum between the Children being pretty ſtrong, and ſeldom ruptured till after the Birth of the firſt Child, the contracting Power of the *Uterus* propels it forwards, and it burſts by the Weight of the Water it contains.

Twins are common enough, but it is not often that we meet with a Plurality of Children, and when we do, the Woman ſeldom carries her Burthen to its proper Period, nor do the Children in general long ſurvive.

In the Caſe of Twins or more Children, it is ſeldom that each Infant preſents fair to the Birth; the firſt, in general, is a Breech or footling Caſe, or if that preſent the Vertex to the *Os internum*, the ſecond moſt commonly lies acroſs.

Tho' the Doctrine of Superfœtation has been for a long Time, in ſome Meaſure, exploded, it has yet its Advocates; among whom is the learned and ingenious *Haller*, who, in his *Opuſcula Pathologica*, has this remarkable Paſſage.

'After I had publiſhed my Commentaries 'upon *Boerhaave*, I found, in three Bodies, 'where the *Uterus* was burſt, and in other preg- 'nant *Uteri*, that the Tubes are very little af- 'fected by Pregnancy, and that the Part of the '*Uterus* between the Tubes, is not much in-

creaſed,

'creased, and but a little convex? but as in 'pregnant Women, the Tubes are almoſt pen-'dulous, and therefore parallel with the *Uterus*, 'hence it ſeems to have happened, that *Daventer*, 'and other anotomical Writers, have made 'the Tubes, during that State, to go out a 'long Way below the upper Part of the *Uterus*. 'Dr. *Parſons*, likewiſe obſerves, that there 'can be no ſuch Thing as Superfœtation, be-'cauſe in pregnant Women, the Tubes come 'out a great Way below the *Fundus uteri*, 'and cannot reach to the *Ovaria*; but theſe 'Aſſertions are proved to be falſe, by many 'Experiments *(a)* which I have lately made; 'for it is certain, that Superfœtations do hap-'pen, and in pregnant Women I have ſeen the 'Tubes of ſuch a Length, as to be capable of 'reaching the *Ovaria* very eaſily.'

Dr. *Parſons*, whom *Haller* mentions in the above Quotation, publiſhed in the Courſe of ſome Lectures read before the Royal Soci-ety, on muſcular Motion, a few Remarks on the *Gravid uterus*, and is of Opinion, that after Conception, the fallopian Tubes become flaccid and pendulous, that they loſe, for a While, their erective Faculty, and conſequent-ly can neither convey the Semen to the *Ovum*, nor reach to embrace that in any future Coition; which Doctrine appears very plauſible, allow-ing the *Uterus* to have acquired ſufficient Bulk to effect the Removal of the Tubes from the *Ovaria*, in the Manner he mentions; yet there will an Argument ariſe againſt this Doctrine,

(a) Which Experiments however, he does not mention.

from

from a Cauſe, which *Haller*, and I believe *Parſons* alſo have overlooked.

We know, that the impregnated Ovum, ſoon acquires Bulk enough to come in Contact with the whole internal Surface of the *Fundus uteri*: we know alſo, that the *Cervex uteri* is, immediately after Impregnation, and from thence, to within even a few Days of the Period of Geſtation, entirely cloſed with a tenacious and viſcid Gluten: and we believe, that the Effect of Impregnation is produced by the *Semen virile*, abſorb'd by the Tubes, and conveyed to the *Ovum*, and ſo on. Let us conſider therefore, by what Means the Semen can reach the Orifice of the Tubes, when not only the *Cervex*, is ſo effectually clos'd up, but the *Fundus uteri* uniformly filled and diſtended, and conſequently thoſe Orifices for a Time obliterated.

When the Womb is impregnated with two or more *Ova*, it is poſſible that one may, by ſome Accident, be deſtroyed or forced away, while the other is ſtill retained in the *Uterus*, till it arrives at its full Maturity; or after the Birth of a ſtrong and healthy Infant, a ſmaller one may follow, which ſhall appear much emaciated, or perhaps dead, and partly putrified: this however, tho' the Foundation upon which this ſtrange Notion was built, is far from a Proof of its Poſſibility, conſidering the Cauſes above-mentioned to concur againſt it.

What was formerly by the beſt Practitioners, and is ſtill, by the Ignorant, called a falſe Conception, we are now convinced is nothing leſs than

than the Diſſolution of an actual *Fœtus*, by ſome Means or other deprived of the Vis-Vitæ, ſoon after its firſt Formation in the *Uterus*.

If the *Ovum* does not equally attach itſelf to the whole internal Surface of the *Uterus*; or if the *Chorion*, thro' its whole Circumference becomes vaſcular and fleſhy, like the *Placenta*; or if the *Placenta* has an Annuliſm in, or various Tumors upon it, of any Bulk; or if the Origin of the *Funis* be loaded, or ſurrounded with Hydatides; the Produce of that Conception muſt inevitably Periſh: but will not however be always thrown off, till the *Fœtus* is in all its Parts compleatly unfolded. Theſe Cauſes of Abortion, are perhaps more common, than is generally imagined, and are always preceeded by a Flooding; and it is commonly about the third or fourth Month, that Nature endeavours to free herſelf from theſe extraneous, and uſeleſs Burthens.

It was formerly imagined, that ſome Defects, or Irregularities in the Mixture of thoſe Parts which either Sex was ſuppoſed to furniſh, in the Formation of a Child, was the Cauſe of theſe Phænomena; but Experience has convinced the more accurate Anatomiſts of later Days, that a very ſhort Time is ſufficient to complete the Solution of thoſe tender Staminæ: an Embryo may be diſſolved in a few Hours, and a Fœtus often or twelve Weeks, in three or four Days, into clear Water, and after this Diſſolution, it may ſtill be retained in the *Uterus*, for ſome Time. But if the entire *Ovum* be thrown off immediately on the

Extinction of its vital Principles, the Parts may be diſcovered intire, on opening it with a little Precaution; but if on the contrary it ſhould be ruptured, in paſſing thro' the *Os uteri*, the imperfect Embryo may be ſo confounded with the Coagula and Diſcharges, which precede and attend its Delivery, as not to be diſcovered or diſtinguiſhed from them, and there will only remain to the View, an imperfect Placenta, with a thick and irregular Cyſt; but when the Parts of the *Fœtus*, are completely formed, it will be ſometimes forced away whole, and the Membranes and Placenta, may be afterwards protruded, in the Condition above deſcribed, or as diſtinctly and regularly conſtructed, as after a Delivery at the full Time.

It has ſometimes happened, that after the Diſſolution of the *Fœtus*, when the Chorion and Placenta have been blended in one vaſcular and carniferous Subſtance, that the whole Maſs has been retained for ſome Months in the *Uterus*, till it has acquired a Bulk and Conſiſtence as ſolid and tenacious as the Heart, in the Centre of which, is a Cavity, containing the Waters and diſſolved *Embryo* or *Fœtus*; this is the Tumor, not improperly diſtinguiſhed by the Name of Mola.

There is another Species of falſe Conception among old Women, more frequently met with than either of the former, which are merely Coagula, or Blood congealed in the *Uterus*, and expelled on the third or fourth Day after Delivery, or ſometimes later. It will frequently happen, that Part of the Membranes, will be torn

torn from the Placenta, and retained in the *Uterus*, which is in itſelf, a Matter of little Conſequence, but furniſhes an ample Field for Speculation and Cenſure for the Nurſes, who moſt commonly conclude, that becauſe this is generally forced away, with a conſiderable Quantity of congealed Blood enveloped in it, it ought to have been brought away immediately after the Burthen; that it is a falſe Conception, and would have been a Child, but for ſome Accident, dependant on too myſterious Cauſes for our Comprehenſion.

SECT.

SECT. X.

Abortions, and Extra-uterine Conceptions.

WHEN before the third Month, the Embryo is by accident diſlodged or thrown from the *Uterus*, it is called a Slip: if after quickening, the like Accident occur, a premature Birth, and at other Times it is properly a Miſcarriage. A ſudden Surprize, Grief, Longing, Fatigue, or in ſhort, whatever diſcompoſes the Œconomy of Nature, in the Mother, may occaſion the Death of the Infant, or Separation of the Placenta, either of which Cauſes muſt infallibly produce a Miſcarriage.

The earlier Miſcarriages are almoſt always preceeded by a conſiderable Effuſion of Blood, which will not be in Proportion to the Increaſe of the *Fœtus*, or to the Bulk of the whole Appendages of the Gravidation, for it will frequently happen that the Diſcharge of Blood will be very great, and far exceed what may be at other Times produced, by a Pregnancy of greater Bulk, and more Maturity.

The Death of the Child may be occaſioned by Diſeaſes peculiar to itſelf, which are not to be accounted for, as well as by Cauſes dependant

dant on the Mother, and likewiſe by Accidents which may befall it in the Womb: as for Inſtance, if the Waters are accumulated in a large Quantity, and the Navel-ſtring long, the Child's Head may paſs thro' a Circumvolution of the *Funis*, by which Means the Neck will be ſurrounded by it, and the Circulation will if drawn tight, be ſtopped, or if the Infant be very ſmall, the whole Body may ſlip through, and the *Funis* be tied in a Knot, which, by ſtopping the Circulation, muſt inevitably occaſion its Death. By the Motion of the Child's Limbs it is poſſible alſo for the *Funis* to be ſufficiently entangled to produce the like melancholy Cataſtrophy, though they are Accidents that rarely happen.

The *Fœtus* being dead, and the Circulation ſtopt in the *Funis* and *Placenta*, the *Uterus* no longer ſuffers any Degree of Diſtention, and conſequently a contracting Effort is ſpontaneouſly formed; this however, will not immediately acquire ſufficient Strength to effect an Expulſion of the dead *Fœtus*, unleſs the *Cervix* was nearly quite diſtended, and the *Os uteri* lax, and ſomewhat dilated; but as the *Fœtus* ceaſes to encreaſe, and the Waters are no longer accumulated, the *Uterus* will not long remain in a State of Inaction, but will forcibly contract itſelf, till the Membranes are protruded thro' the *Os externum*, and the whole Burthen is at length diſcharged; though ſometimes when the Infant dies, between the ſixth and ſeventh Month, the Expulſion will not happen till that Period is compleated; or if after the ſeventh Month, not till the full Extent of the Term of Geſtation.

When

When the Infant dies, the Mother is generally affected by Sickneſs, Faintings, Tremors, or cold Sweats and Shiverings, theſe however, ſeldom continue long, and are eaſily removed by bleeding and cordial Medicines, of the nervous Claſs; a heavy Weight will be perceived to fall from Side to Side, on turning in Bed, and a Coldneſs over the Rim of the Belly. Though if the Child has before been ſtrong and lively, the Ceſſation of its Motion will afford us an almoſt infallible Criterion, yet ſometimes the Infant will not move for ſome Hours, or even Days before the Labour-pains come on, and there have been Inſtances, where the Child has never been perceived to move during the whole Time of Geſtation.

If by any Accident the *Placenta* ſhould be in ſome Degree ſeparated from the *Uterus*, tho' the Infant might ſtill for ſome Time be nouriſhed and ſurvive, a Miſcarriage or premature Labour muſt neceſſarily follow, unleſs by bleeding, and the ready Application of ſtyptic Medicines, the Effuſion of Blood, which in this Caſe muſt inevitably happen, can be ſpeedily ſtopt. The Veſſels of the ſeparated Parts of the *Placenta* and *Uterus*, continually diſcharging freſh Blood, with a conſiderable Impetus, it inſinuates itſelf down the Sides of the *Uterus*, and diſſects away the Membranes from their Adheſion to it, and forces a Paſſage through the *Os internum*, which will not in this Caſe, be much dilated, and the Membranes will be felt intire within it.

Separations

Separations of the *Placenta*, either wholly, or in part, ſeldom or never admit of any Remedy, but in the Expulſion of the *Fœtus*; ſlight Floodings will ſometimes happen, from partial Separations of the Membranes only, or premature Diſtentions of the *Os internum*, and theſe may perhaps be relieved by Medicine; but there cannot be a more melancholy Caſe than a total, or even partial Separation of the *Placenta*, unleſs it be indeed very inconſiderable.

Violent Agitations of Mind or Body, Coughing, ſtraining to Stool, ſudden Intelligence of good or ill Fortune, Frights, and innumerable other Cauſes, may produce theſe fatal Accidents; and if from theſe or any other Cauſes, an Impetus be made upon the *Os internum*, which occaſions it prematurely to open and expand itſelf, the Membranes may be torn, and the Waters evacuated, which will as effectually as any of the foregoing Cauſes, bring on the Expulſion of the Child; all which Effects may likewiſe be produced by a relaxed State of the Parts, in very delicate and enervated Habits, the *Os uteri* being unable to reſiſt the diſtending Force of the *Cervex*, towards the latter End of Geſtation.

After all Miſcarriages and premature Labours, great Care muſt be taken to deliver the *Placenta*, which is frequently left behind, with the *Funis* torn off cloſe to it, eſpecially in the earlier Months; the *Cervex uteri* will ſoon contract itſelf before it, while it ſtill keeps the *Fundus* in a State of Diſtention, and a Flooding will moſt commonly continue till it is diſcharged,

and

and it will be attended with fatal Conſequences if too long neglected, and give the Patient great Pain and Anxiety.

The Works of the learned afford us Variety of Hiſtories of extra-uterine Conceptions, yet we cannot but with Pleaſure, reflect on the Paucity of Examples ſo many Years Obſervation has furniſhed, ſince the firſt Diſcovery of this Phænomenon. Dr. *Smellie* has collected almoſt all the Caſes of this Nature, worth our Notice, that have hitherto been publiſhed.

After two or three other Caſes, he gives us one from the Philoſophical Tranſactions, related by Dr. *Fern*, this Woman died in the *Hotel-Dieu* at *Paris*, after ſuffering great Torment, and imagining herſelf for ſome Time in actual Labour: after Deceaſe, on opening the Body, a Quantity of bloody Water came away, and there appeared the Head of a Child, and when the Parts were all laid open, an entire female *Fœtus*, in a Bag, which was both its Womb and Membranes, the *Placenta* adhering firmly to the *Meſſentery* and *Colon*. He has a Caſe alſo, from the ſame Source, communicated by Dr. *Houlſton*, of a Woman who had an extra-uterine *Fœtus* five Years in her Abdomen; this Woman, for about five Months before her Death, voided her Excrement, and ſome of the Parts of the *Fœtus*, through an Aperture made by an Impoſthume. From St. *Maurice* he gives a Caſe of a *Fœtus* in the *Ovaria*. Next follows the Caſe of a poor Woman, who had an extra-uterine *Fœtus* in her Body, the Space of forty one Years, and

bore

bore five Children in the Time: and lastly, the singular Case of an extra uterine Conception, found by Dr. Middleton, which had lain in the Woman's Body upwards of sixteen Years, who had born in that Time, four live Children, viz. three Boys and a Girl. On opening the Body after her Death, the *Uterus* and other Contents of the Abdomen, appeared nearly in their natural State, but on the right Side a Child presented itself, attached to the *Ileum*, and neighbouring Membranes by a Portion of the *Peritonæum*, in which the *Fimbria*, and Part of the right Fallopian Tube, seemed to lose itself. The *Fœtus*, tho' not putrid, was become so callous, that its Parts could scarcely be distinguished. In this Woman the right Fallopian Tube, was for a long Time destroyed, yet she bore three boys and a Girl, which incontestibly proves the Notion to be false, that Boys are conceived on the right Side, and Girls on the left.

In the *Bibliotheca Anatomica*, we have the Case of a Woman who at the usual Period of Gestation, had such Pains, as made her judge herself to be in Labour, but to no Purpose. About this Time the *Fœtus* died, and at the End of the eighteenth Month, after suffering a great deal, she complained of great Pain about her Navel, which was succeeded by a fungous Ulcer near that Part, which was afterwards dilated, and the *Fœtus* taken out, which lay in the right Fallopian Tube, the Head downwards, and its Heels to the Diaphragm, the *Placenta* adhering to the Tube. This Woman we are told, recovered from this seemingly improbable

Operation, and bore Children afterwards, viz. a Girl within two Years and in the Space of another Year, a Girl and a Boy at one Birth.

These Cases would seem to convince us, that in order for Impregnation, the Semen must be conveyed by the Tubes to the *Ovaria*, and that the impregnated *Ovum*, meeting with some Obstruction in its Passage to the *Uterus*, had taken Root, and been matured in the Part where it so met with an Impediment.

Though the preceding Sections contain the more material Elements of the obstetric Art, there is a THEORY *also deducible from Practice, which, as it will not admit of an abstracted Distinction and Separation, must be occasionally interspersed in the several Sections of the next Division——Among these may be reckoned the diagnostic Inferences to be drawn from Examination in the Vagina, and the various Causes whereon the Difficulties and Protraction of Labours depend.—The darling* THEORY *of* Daventer, *on the Obliquity of the* Uterus, *I have arranged among the Causes of Lingering and difficult Labours, having used the Term in a more extensive Latitude than may perhaps be Critically just, as I do not mean by the general Term* THEORY, *the vague and disputable Systems of different Authors, but the invariable Anotomical and mechanical* PRINCIPLES *whereon the* ART *of* MIDWIFERY *depends.*

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A COMPENDIUM &c.

PART II.

PRACTICE.

SECT. I.

Method of Examination. Signs of Labour, &c.

THE first practical Operation of Midwifery, is the Art of TOUCHING, or the Method of examining the State of the *Os internum*, by passing one or two Fingers up the Vagina, to discover thereby, whether a Woman be actually with Child; how far she is advanc'd in her Pregnancy; and in the Time of Labour, to distinguish what Part of the Child presents.

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The *Os internum* (a) in an unimpregnated State, is generally ſmooth and even, the Orifice ſmall, and but juſt perceptible unleſs in Women who have had many or very hard Labours, it will recede from the Touch, and no ſenſible Weight be felt, on paſſing the Finger up to it.

In the firſt three or four Months of Pregnancy there will be very little, or no Difference but about the fifth Month, when the *Fundus Uteri*, is pretty largely diſtended, and the *Cervix*, begins to undergo, the ſame Alteration; the Womb, on paſſing the Finger will preſs upon it with an evident Weight; and above the Edge of the *Os Tincæ*, the Tumor, occaſioned by the Diſtenſion of the *Uterus*, may be perceived: the *Tubercle*, will feel ſofter, flatter, and more ſpread and its Orifice, will be more diſtinct: Generally, at the ſeventh Month, the *Cervex Uteri*, being fully diſtended, the *Os Timæ*, will begin to be a little opened; and the Membranes may be felt thro' it; tho' ſometimes, even in the eighth Month, and indeed, now and then, a Subject will be found, wherein, at the Begining of real Labour, ſome Part of the *Cervix*, will ſeem to remain undiſtended, and the Finger, may be paſſed up it, as in a Sheath, till the Child may be felt thro' the Membranes.

When the Time of parturition advances, and the Child is pitch'd properly, and preſents for the Birth, a ſmall Share of Sagacity, will ſuf-

(a) By this general Term is comprehended the whole Tubercle, or protruded Part of the *Cervex Uteri*.

fice

fice, to form a poſitive Judgement, in regard to the Certainty of Labour; and to diſtinguiſh the real, from ſpurious or unprofitable Pains; but the natural Thing to be known, and what requires, both Skill, and Experience, to determine with Preciſion is, what Part of the Child's Head, or what other Part of the Body preſents.

Nor is it leſs difficult, to Aſcertain the Certainty of a Woman's being really pregnant, when that is dubious, and to be determined only, by Examination in the *Vagina*.

In order to examine, when we ſuppoſe that Labour is at hand, the beſt Method, is to lay the Patient on her left Side, and after anointing the two fore Fingers of the right Hand, with a little Pomatum, or any other unctous Matter, to paſs them up towards the Hollow of the *Os Sacrum*, and then, give them a little Turn, as if by that paſſage you would reach the navel: by this Means, they will reach the *Os Uteri*, which, will perhaps, be ſufficienly open'd to admit the Point of one, or perhaps both the Fingers: it will feel like the Mouth of a Purſe, ſtrongly, but very ſmoothly, puckerd up; and the Membranes, may be perceiv'd to protrude thro' the Orifice, like a Bladder diſtended with Water: and as the Bladder, is by every Pain, gradually puſh'd forward, it by Degrees dilates the Orifice of the Womb, and deſcends to the outer Orifice, which it alſo gradually dilates, and if not prematurely broken, puſhes out the *Perinæum*, in the Form of a large, round Tumor. This is to be underſtood only, of an eaſy Labour; in a difficult one, the Membranes will moſt

moſt commonly break, before the *Os Uteri* is more dilated, than barely to admit the Entrance of two, or three Fingers; or before the Head has got below the Brim of the *Pelvis*; very often indeed they will break before any Pains ariſe, which moſt Commonly prognoſticates, a laborious and lingering Labour.

From the above Circumſtances, the Certainty of Labour may be infallibly known; and the real as infallibly diſtinguiſhed from the ſpurious Pains; for in real labour, every Pain will more or leſs dilate the *Os internum*, which in the ſpurious ones is not in the leaſt affected.

It is not uncommon at the ſeventh or eighth Month, for Women to be ſo afflicted with thoſe falſe Pains, as to be deceived into an Opinion of their being really in Labour: and this can only be ſatisfactorily known, by actual Examination; and unleſs the Operator has ſome Skill, he may alſo then be deceived; but a juſt Idea, and Remembrance, of the Circumſtances above recited, will enable him at all Times to form a preciſe Judgement.

It will be much more difficult to determine by the Touch, the Certainty of real or apparent Pregnancy; in the early Months, little Satisfaction is to be gain'd, even this Way; however, it is highly neceſſary, when ſeveral concuring Circumſtances, have induced a Perſon, afflicted with a diſeaſe in the *Uterus*, *Ovaria*, or neighbouring Parts, to believe herſelf with child, to make this Examination, as ſoon as we have Reaſon to ſuſpect the Poſſibility of a Miſtake.

To

To form a Judgement on this Occaſion, we may examine the Woman in an erect Poſture and faſting, having firſt Emptied the Bladder and Rectum; but it will be ſometimes better to place her on the Edge of a Bed, in a reclining Poſture and by introducing a Finger of one Hand into the *Vagina*, and laying the other on the Abdomen, to make an alternate Preſſure; the Finger in the *Vagina*, puſhing the *Uterus* upwards, and the Hand on the Abdomen, preſſing on the Tumor and puſhing the Womb down again upon the Finger; by this Means, the Bulk, Circumference, and Weight of the *Uteurs*, or Tumor, will the more readily be diſcovered.

A Tumor in the *Uterus* itſelf, will appear to the Touch in all Reſpects like a real *Fœtus*, unleſs the *Cervex* is ſchirrous, which Kind of Hardneſs will be readily enough diſtinguiſhed: if the Tumor is in the *Ovaria*, Tubes, or any of the connecting Membranes, the *Uterus* will feel as in the un-impregnated State; if the Woman is fat, or her Belly very prominent or pendulous, it will be more commodious to lay her on her Side, or to vary the Sides and Poſture, as the Circumſtances may require: the fore Finger alone, will ſometimes be ſufficient, but in theſe dubious Caſes it is beſt to uſe two, as the *Os uteri* may then be better circumſcribed, and its Situation and Alterations more exactly diſcovered.

By this Examination we may form an accurate and invariable Judgement, of the Nature of the Labour and Structure of the *Pelvis*; whether the Birth can be accompliſhed in the ordinary Way

or

or when, and what Aſſiſtance will be required. Tho' it is not prudent or neceſſary to handle a Woman too often, we muſt not however neglect forming proper Judgements, at the commencement, during the progreſs, and eſpecially towards the Period of Labour; and there is no preciſe Judgement to be form'd, without trying in the Time of a Pain, and alſo when the Pain is relaxed.

The Head of the Child will be eaſily diſtinguiſhed thro' the Membranes, and if we have a clear Idea of the Sutures, and general Anatomy of the Fœtal Skull, we cannot eaſily be deceived, in aſcertaining what Part of it preſents to the Birth; neither can we be eaſily deceived, when the Breech preſents even before the Waters are gone off, unleſs they are collected in great Quantity and the Membranes ſo protruded as to prevent the Fingers reaching the Child. The broader part of the Hip, may be miſtaken for the hind Head, by thoſe who form their Judgments, on too curſory Obſervations, and are not acquainted with the Structure and Feel of the Parts: the Hand has been frequently miſtaken for the Foot, but the Difference between the Fingers and Toes may be eaſily remembred, and diſtinguiſhed; a little Practice, will even enable us to determine, whether it be the right, or left Arm by the Thumb, and alſo of the Foot, by the great Toe; when either of thoſe Parts preſent, the Knee and Elbow, are apparently ſo ſimilar, that they may be miſtaken for each other, but as there is a diſtinguiſhing Difference, to wit, the *Patella*, and as the Miſtake, in drawing forth the Elbow for the knee, may be of ſome Conſequence, that Characteriſtic muſt be always remembred, and diligently

diligently conſidered, by the Practitioners of this Art.

Theſe are the more common Parts of the Body, in which a Practitioner may be deceived, when either of them preſent: other Parts will alſo be ſometimes protruded, but the Examples above recited, are ſufficient to direct us, in forming our Judgement upon them.

Generally, a few Days, but ſometimes a few Hours only, before the Commencement of Labour, the glary Mucus which hitherto, cloſed up the Orifice, will be diſcharged from the *Uterus*, moſt commonly clear and colourleſs, but now and then tinged with Streaks of Blood. When this Diſcharge, or an Irruption of the Menſes, or a Flow of Water from the *Uterus*, attended with periodical Pains in the Loins and Abdomen, occur to a Woman in a State of Pregnancy, we are ſure, the Labour cannot be long delayed; though its Progreſs, will be more rapid, or lingering in Proportion to the Pain which accompanies thoſe Symptoms.

SECT. II.

Nature, Cauſes, and Effects of Labour Pains. Diviſion of Labours. Poſition and Management of the Woman.

THE real Throes of Labour, are convulſive Spaſms, ariſing from a contracting Effort, of the elaſtic Fibres of the whole Subſtance of the *Uterus*, which being ſtretched, to its utmoſt Degree of Diſtenſion at the *Fundus*, the Neck and *Os internum*, which were before the ſtrongeſt, become now the weakeſt Part, and the *Os uteri* gradually gives Way.

Thus the Nerves, and muſcular Fibres, and indeed the whole uterine Syſtem are ſpaſmodically affected, and being more irritable, and ſenſible about the *Os internum*, than any other Part, they excite an uneaſy Senſation, which produces in the Woman, a Sort of Effort to procure Eaſe; to this End ſhe fills her Lungs with Air, which gives a Preſſure to the Parts beneath, and compreſſes her Womb, by contracting the Muſcles of the *Abdomen*; by theſe Means, the Pain is rather encreas'd than abated, the Waters and Membranes, are protruded againſt the *Os Uteri*, which is thereby of Conſequence gradually open'd.

From

From the Nature of the Pain it occaſions, the Woman is not able to continue this Effort for any Time; the Muſcles loſe for a While, their Power of Contraction, and a Remiſſion of Pain enſues, till the diſtending Force from within, or the Elaſticity of the uterine Fibres without, again renews the Irritation and brings on, from the Connection of Parts, Pains in the Back, Loins, Thighs, &c. during the Continuance of every Pain, whether the *Os internum* is preſſed upon, by the protruding Waters or Head of the Child, (if the Waters are in ſmall Quantity or are prematurely evacuated, with little or no Pain, on the firſt Efforts of Nature to dilate it,) it appears to the Touch, to be much ſtretch'd, and very rigid; but on the Remiſſion of the Pain, it again contracts itſelf a little, and ſeems more relaxed; but it very often requires a long Time, and many repeated Pains, to dilate it ſufficiently for the Operator's Aſſiſtance to be of any material Service to the Woman, eſpecially where the Waters do not aſſiſt the Dilatation.

In this Manner, the Labour Pains, continue to remit and return periodically, growing ſtronger and more frequent, till the *Os internum*, is compleatly dilated, the Waters diſcharged, and the *Uterus* contracting, and aſſiſted by the Contraction alſo of the Muſcles of the Abdomen, and common Integuments, the Child is forced along, and delivered.

Thus ariſe, and thus proceed, the true Pains; the ſpurious ones, which are frequently very troubleſome to Women in the laſt Weeks of Geſtation,

Geſtation, are partly occaſioned, by the ſame Cauſes, but are more of a cholichy Nature and do not produce, any Effect, on the *Os internum*. A gentle Anodyne will frequently however aſſiſt the Relaxation of the *Os uteri* and in ſome Meaſure, remove thoſe Pains; it will be ſometimes neceſſary to bleed on this Occaſion, and to adminiſter a Gliſter, or gentle Purgative.

Labours are divided, into three general Claſſes natural, laborious, and præternatural: in whatever Poſition the Head advances, it is always deem'd natural, when the Labour begins, at the Expiration of forty Weeks, from the Time of Conception; it will be eaſy or laborious, in Proportion, as the Pains, are ſtrong, or languid, as the Head, is advantageouſly, or indirectly preſented; as the Parts, are ſoft, or rigid; or as the *Pelvis*, is well or ill form'd.

A natural and eaſy Labour, requires no Aſſiſtance, but to lubricate the Parts, to guard the Perinæum, to ſeparate the *Funis*, and to receive the Placenta. But a Labour render'd difficult or tedious, by the Largeneſs of the Child's Head; the wrong Poſition of it; the Straitneſs of the *Pelvis*; and various other Cauſes, to be explained hereafter, is with great Propriety, deem'd laborious, and is often more perilous and ſevere, both to the Mother and Child, and more fatiguing and perplexing to the Operator, than thoſe properly called præternatural, including all Births, that preſent in any other Poſture than the Head, to the *Os internum*.

There

There is one Species of Labour hitherto undiſtinguiſhed which is neither abſolutely natural, or præturnatural; it is a Kind of mixed Labour, and is always perilous and laborious; I mean thoſe Births, where the Funis comes down with, or before the Head, and thoſe where the Placenta preſents with the Head alſo to the *Os uteri*.

It is needleſs to mention the various Contrivances, invented for the Accommodation of Women in Travail, or the different Poſitions, which are or have been in Uſe, in different Parts. The moſt eligible Method, is to lay the Woman in her Bed; on her left Side; her Knees up to her Chin; her Feet reſting againſt the Bed-poſt, or the Breech of an Aſſiſtant, her Shoulders a little raiſed, and her Head ſunk into her Boſom; with a Cloth tied to the Poſt or Laceing of the Bed, to hold in her Hand, and enable her to make Purchaſe in the Time of her Pain. Proper diluting, and mild Cordial Drinks ſhould be given occaſionally, to recruit, and ſupport her Spirits; ſhe ſhould never be directed to ſtrain, till the *Os Uteri* is nearly dilated; and then, only in the Time of Pain, to make an Effort to ſtool. The Rectum ſhould always be cleared, at the Begining of Labour and the Contents of the Bladder evacuated, before it is too far advanced; a ſufficient Quantity of Cloths, Flannells &c. ſhould be laid under her, to ſpunge up the Diſcharges, and ſo diſpos'd, as to admit of folding over occaſionally; and of being eaſily drawn away after Delivery.

SECT.

SECT. III.

Progreſs and Occurrences of an eaſy Labour. Delivery of the *Placenta*, &c.

AT the Commencement of Labour, the Child's Head, moſt commonly preſents to the Brim of the *Pelvis*, with one Ear to the *Pubes*, and the other to the *Sacrum*; the Forehead to the left, and the *Occiput* to the right *Iſchium*. As ſoon as the *Occiput* gets below the Edge of the *Pubes*, the Forehead turns into the Hollow of the *Sacrum*, and the hind Head, riſes, by a half Turn over and without the *Pubes*, as upon an Axis, and the Forehead, puſhing back the *Coccyx*, the Face deſcends along the Hollow of the *Sacrum*; the *Perinæum* is protruded before the Head in Form of a large, round, and uniform Tumor; but in ſome Caſes where the *Pelvis* is capacious and the Head not too bulky, the Face will be turn'd into the Hollow of the *Sacrum* at the Commencement of Labour, and even before the Membranes are protruded or the *Os uteri* is much dilated.

When the Head is releaſed, the Infant is to be gently drawn forward, by placeing one Hand under the Chin, and the other under the *Occiput*; or if the Bulk of the Shoulders, ſhould retard

retard the Protruſion, the fore Finger of the right Hand, may be paſs'd up within the *Pubes*, to the *Axilla*, and a Purchaſe made that Way, to aſſiſt the Pain at it's Return, which will greatly facilitate the Birth: ſometimes, it will be neceſſary, to aſſiſt in both Armpits, and the Shoulders, which are from Side to Side, the broadeſt Axis of the Child's Body, muſt be gently turn'd to the wideſt Axis of the *Pelvis*. The Hips will ſometimes alſo occaſion a ſmall Impediment, but the Method juſt mention'd, is ſufficient to remove it. The Force exerted, muſt be always gradual, equal, and concordant with the Pains; but the ſame Pain that protrudes the Head, ſhould, if poſſible, be made alſo to deliver the Body.

In an eaſy natural Labour, the Waters are all along protruded, before the Child's Head, in a regular Form, and the Membranes do not break, till they have dilated the *Os Externum*; by which Time the Head of the Child, is advanced pretty low in the *Pelvis*, and the Membranes being then ſtretch'd, to their utmoſt Degree of Diſtention, are burſt in the Time of a Pain, by the Force of the protruding Waters; on which the Child's Head, immediately falls, to the Edge of the *Os externum*, and in another Pain or two, the *Occiput* riſes round the Edge of the *Pubes*, and a very trifling Aſſiſtance brings it into the World; and indeed it ſeldom requires any, the ſame Pain that breaks the Membranes, being frequently ſufficient, to protrude the Child alſo.

It will ſometimes happen, if the Infant be ſmall, and the Pains very ſtrong, that the whole Contents of the *Uterus*, ſhall be diſcharg'd at once, or at leaſt, all but the *Placenta*; in which Caſe, the Membranes muſt be inſtantly lacerated, leſt the Child's Life be loſt, for Want of the Air's ruſhing, immediately into it's Lungs. It frequently, happens that the Membranes do not break in that Part, which is before the Head, but are lacerated higher in the *Vagina*; and the Waters do not ruſh off ſo ſuddenly, as to bring away with them the protruded Part, but the Head is puſh'd into the World, Envelop'd in the diſſevered Membranes; this is what is call'd, the *Cawl or Monk's-hood*; and we ſhall readily conceive, what Foundation there can be for Crediting the ſuperſtitious Tale, of its ſuppos'd Virtues, when we reflect on the Means by which the Effect is produced, and how eaſy it would be, to impoſe on the Credulity of the Vulgar, by tearing off any Part of the Membranes and paſſing them for a real Cawl.

Tho' in the more eaſy Labours, the Water, as I have juſt mention'd, will be diſcharg'd when the Head is advanc'd to the Aperture of the *Pelvis*, it will ſometimes happen, that the Membranes will be too rigid to yield to the Force of the Pain, and the Situation of the Head, will prevent the Deſcent of more Water to dilate them further, and the Labour, will thereby, be retarded. Under theſe Circumſtances, the Membranes may be lacerated, in the Time of a Pain; whereby the Impetus above will become greater, and the Woman may be delivered, perhaps ſome Hours ſooner, than ſhe otherwiſe might

might have been ; but as on the other Hand, a premature Rupture of the Membranes, may retard the Delivery, this muſt be done with the utmoſt Caution, and only when we percieve by the Touch, that for Want of this Aſſiſtance, the Pains relax, without producing their natural Effect.

Sometimes the Waters will be collected in too ſmall Quantity, to anſwer the Purpoſe of Dilatation : and, on the contrary, they will ſometimes, be ſo redundant, as to riſk the Suffocation of the Infant, if the Face is not carefully turned upwards, to prevent the Waters ruſhing into its Mouth and over ballancing the Power of the inflating Air.

When the Waters break at the Beginning of Labour without Pain, they generally keep draining off, for ſome Hours, ſometimes inceſſantly, ſometimes by Starts, on the Return of ſmall Pains excited by the ſpaſmodic Contractions of the *Uterus*: theſe are called *Aquæ fugitivæ* ; and the Labour Pains ſeldom ariſe to any advantage, till they ceaſe to flow, and the *Uterus* is contracted, round the Body of the Child, which, if it be a firſt Birth, will be laborious.

When the *Perinæum* is ſtretched before the Head of the Infant it muſt be frequently lubricated, and conſtantly guarded, by keeping the Palm of the Hand continually upon it, to reſiſt the too ſudden, and violent Preſſure, during the Pains, which without this Precaution will (eſpecially in the firſt Birth) occaſion a Laceration: the *Fourchett* will however, with the greateſt

Precaution, be frequently injured, but if the Accident does not extend far, it will re-unite in a few Days; but if it extends to the *Rectum*, will require the Aſſiſtance of the Needle. This Preſſure is likewiſe of material Service, in aſſiſting the Head to make it's Turn over the *Pubes*.

When the Shoulders are detained, the *Perinæum*, contracts itſelf, and by a ſecond Protruſion, when they advance, will alſo, if not properly guarded, be liable to Injury, even after it has eſcaped it, from the Head; when, therefore, there is Occaſion to aſſiſt in the *Axilla*, let the Fore-finger of the right Hand be employed, while the Thumb of the left preſſes on the *Perinæum*, and gently puſhes it back, to make Room for the Body to paſs.

When the Child is delivered, a Ligature is to be made on the *Funis*, about three Inches from the Abdomen, and another, about an Inch above it; between which, the *Funis* is to be divided; then the Child's Head muſt be wrapped in a warm, dry Clout, or a Flannel Cap, and put into a proper Receiver, and given to the Nurſe, or any other By-ſtander.——But before the *Funis*, is tied, a warm ſoft Cloth, ſhould be applied to the Woman, to prevent her taking Cold.

Our next Concern, is to deliver the *Placenta*; we muſt firſt however, convince ourſelves, whether or not there is another *Fætus*, remaining; to which Purpoſe, the Navel String, muſt be heldin the right Hand, and gently pulled downward; and the two Fore-fingers of the left Hand being

being properly lubricated, may be paſſed up the *Vagina*, to the Edge of the *Placenta*, which if no other *Fœtus* remains, will immediately preſent itſelf, at the *Os internum*, and may be eaſily brought along; but if another *Fœtus* remains, the Membranes, will preſent themſelves, and the Child may be Eaſily diſtinguiſhed through them: in this Caſe, the *Placenta* muſt be left till after the Delivery of the ſecond Child, when they are both to be brought away together.

The *Placenta*, frequently adheres in part, and ſometimes, its whole Surface; in this Caſe, we muſt wait with Patience, and Aſſiſt gently, by ſhakeing the String with the Right hand, and now and then gently pulling it downwards, while the left Hand is Employed in keeping the *Cervex* and *Os Uteri* from contracting before it, or gently drawing down the Edge of the *Placenta* itſelf: if after ſome Time, theſe Methods fail, and it ſeems pretty firmly attached to the *Uterus*, we may venture to paſs the Fingers gently behind it, and gradually ſeparate it's Adheſion; this however, requires both Skill and Practice to execute with Safety, and muſt always be done with great Caution, leaſt any of it ſhould be torn off and left behind, or the *Uterus* itſelf, be injured by the Operation: the Patient ſhould exert as little Force as poſſible leſt a Flooding ſhould be excited.

Some Practitioners, are of Opinion, that no ill Conſequence can ariſe from leaving the *Placenta* wholly to Nature, even though ſhe ſhould not diſcharge herſelf of the Load, for ſome Hours or even Days, after the Delivery of the Child; yet as many Inconveniencies have ariſen, from

a too

a too long Retention of this Subſtance, after it is become uſeleſs to the Body, I would always recommend its being delivered, as ſoon as poſſible, without Violence; not forgetting this Precaution to the younger Practitioner, neither to do too much, or neglect what is neceſſary.

That the leaving it wholly to Nature, would occaſion the Woman, to ſuffer very great, and in ſome Degree, unneceſſary Pain, is certain, from what we ſee them ſuffer, even on the Expulſion of the common Coagula; and that it may be productive, of troubleſome Floodings, and obſtinate Weakneſſes, we may infer, from ſimilar Effects, produced by ſimilar Cauſes, in the Caſe of Miſcarriages and premature Labours, where the Contraction of the *Os Uteri* has prevented the Diſcharge of Part of the Secundines, and a Flooding has continued, till the Evacuation has been compleated.

When the woman is delivered, and the Placenta taken away, the Operator, muſt immediately, apply one or two warm ſoft Cloths, (which if the Parts have ſuffered very much, from the Labour, ſhould be ſmeared with a ſoft Ointment) to the *Os externum*, and tuck them up as cloſe as poſſible, to the *Anus*, and over the *Mons Veneris*: the wet Cloths, ſhould be removed, and dry ones put under her; then a refreſhing drink, or pallatable Cordial, ſhould be immediately adminiſtered, to recruit her Spirits: a ſmall Draught of warm Water, with a Spoonful of Wine, or Brandy, and a little Nutmeg, is generally ſufficient: the lower Part of the Abdomen muſt

muſt be confined by a proper Bandage, and the Breaſts covered with a warm Cloth.

The natural Diſcharges, are to be moderately promoted and the Juices diſpoſed, to a bland, and balſamic Nature, by a Spermaceti Emulſion, and nouriſhing Broths; the Diet muſt for ſome Days at leaſt, be light, and of eaſy Digeſtion.

The Child muſt be waſhed with warm Water with a little Spirits, or Wine; the *Funis* is to be rolled, or folded in a Piece of fine Rag, and turned upwards, on the Abdomen, and confined, by a ſmall Flannel Band. Generally about the fourth or fifth Day, the *Funis* dries, and falls off; but will ſometimes, inflame and ſuppurate: the proper Evacuations of Stool and Urine, ſhould be promoted as ſoon as poſſible, by gentle Means, but the common Method of loading them, with Butter and Sugar is very bad; Nothing is more apt to grow rancid, or create Phlegm, than either of thoſe Ingredients, and therefore, a little warm Water moderately ſweetened with a few Drops of Brandy or ſome carminative Water is much better.

SECT.

SECT IV.

Lingering Labours, not abſolutely laborious. Various Accidents that may retard, or haſten Delivery.

When the *Vertex* preſents fair to the *Os internum*, and there is little or no Waters protruded through it with the Membranes; the Labour will neceſſarily be retarded till the Head can make that Preſſure on the *Os Uteri* which is requiſite for its Dilatation, and which cannot be effected, till by the Waters being partly diſcharged, the *Fundus Uteri*, can contract itſelf, ſo as to puſh the Child down with ſome Force upon the *Os internum*.

The Head ſhould in general reſt at the Brim, till the Waters have protruded the Membranes into the Cavity of the *Pelvis*, and have dilated the *Os Uteri*, to the Diameter of a Crown Piece, but in the Caſe above recited, the Head is prematurely forced into the Middle of the *Pelvis*, and by plugging up the Paſſage, prevents the Deſcent of the Waters, which ſhould protrude the Membranes, and facilitate its Delivery.

In this Caſe, the Membranes will ſometimes lie ſo flat on the Cranium, as to make one almoſt

moſt conclude that they muſt have ruptured and diſcharged their Contents; but the hairy Scalp, the Feel of which is ſo different from the ſmooth poliſhed Surface of the *Chorion*, will afford an infallible prognoſtic on theſe Occaſions.

Before we take any Meaſures for forwarding the Delivery, which ſeems only to be retarded by the Confinement of the Waters, we muſt aſſure ourſelves that the Obſtruction does not depend on any other latent Cauſe. To do this, a Finger or two muſt be paſſed up the Vagina, and the Head muſt be firſt circumſcribed, to feel if it be not locked between the Bones, and then gently lifted up, in the Receſs of a Pain: This will occaſion a ſmall Quantity of Water to fall down, and protrude the Membranes, which, if the *Os uteri* be dilated, to the Breadth of a Half Crown, and is not rigid, may be ſcraped with the Nail, in every Pain, till they ſplit, and ſuffer the Waters to flow off, which will, in a little Time, bring the Labour to a fortunate Iſſue, by forwarding the Contraction of the *Uterus*.

If the longeſt Axis of the Child's Head be rather obliquely than exactly turned to the longeſt Axis of the *Pelvis*, the Labour will alſo be protracted, though it may not become ſtrictly laborious; but the Difficulty will be much greater if the Forehead turns towards the *Pubes*, than if it is turned to the Space between the *Sacrum* and the upper Back-part of the *Iſchium*. This Circumſtance ſeldom occurs, but where the upper Part of the *Sacrum*, or the lower Vertebra of the Loins intrude on the *Pelvis*, and

and make it rather ſtrait and incommodious: as therefore the Forehead cannot turn into the Hollow of the *Sacrum*, till the *Occiput* is forced below the *Pubes*, no Aſſiſtance can conveniently be applied; till the Pains have advanced it ſo far, as that a Finger or two may be applied to the *Occiput*, or Side of the Forehead, to aſſiſt it in that Turn.

When the Head of a ſmall Infant falls into the Capacity of a well-formed *Pelvis*, puſhing the *Os uteri* before it, as far as the *Pubes*, and that is very thin, and but little dilated; if the Reſiſtance from below is prematurely removed, or the Waters too ſoon diſcharged, the Head may be ſo forcibly protruded, by the ſuddenly increaſed Impetus of the Parts above, as to lacerate the *Os internum*; though this Accident will be more liable to occur in a Breech-Caſe than a natural Birth: The Buſineſs of the *Accoucheur* in theſe Circumſtances, is to counteract the too powerful Operations of Nature, and not to ſuffer the *Fœtus* to deſcend too haſtily, or the *Os internum* to be too ſuddenly dilated.

When the Head of a large Infant has forced to the *Os externum*, and the *Occiput* is beginning to riſe over the *Pubes*, if the Precaution of guarding the *Perinæum* be neglected, the Force of Pain will lacerate the Parts, and the Child will be ſo ſuddenly and forcibly protruded, as to expoſe the Woman (beſides the ſometimes irrecoverable Inconvenience of lacerating the Parts) to Floodings, Syncope, and other alarming Accidents, from the too ſudden Evacuations of the Contents of the *Uterus*.

When

When an immoderate *Fluor albus* has impaired the Conſtitution, and relaxed the whole Frame of a pregnant Woman; if the Child be not bulky and ſtrong, which it ſeldom is; if the Head preſents fair, and the Pains are ſtrong and forcing, the Labour will be ſhort, and the Birth precipitate.

When the Membranes are broken, before the *Os uteri* is properly dilated, the Labour will, of Courſe, be rendered tedious, if not difficult, for Want of that Aſſiſtance Nature could have given, by Means of the protruding Waters. It is not uncommon for the Waters to break without any Pain, twelve, twenty-four, or ſometimes eight and forty Hours, before the real Labour Pains come on. When there is a Collection of Water between the Laminæ of the Membranes, the outer one being extremely delicate, will be broken, ſometimes at the ſeventh or eighth Month, ſometimes between thoſe Periods, and ſometimes, about ten, or fourteen Days, before the full Term of Geſtation; and when the Pains come on, there will be ſtill a Collection of Water, protruded in the natural Way, as generally, in thoſe premature Waters, it is only the outer Membrane that breaks, and diſcharges the Fluid accumulated between the Laminæ, while the inner Membrane, which contains the *Fœtus*, and its Waters, remains entire, and is not broken, till the Labour advances.

When the real Waters are prematurely diſcharged, whether by Accident, or with a View of forwarding the Delivery, the Pains will im-

mediately, remit for ſome Time; and as in the Inſtance of their breaking with little or no Pain, at the Commencement of Labour, will not attain any Degree of Strength, (nor can the Delivery advance) till they are all diſcharged, and the *Uterus* is forcibly contracted round the Child. We ſhall ſhortly have Occaſion to reſume this Subject.

The Rigidity of the Membranes, reſiſting the Preſſure of the protruding Waters, is alſo a Cauſe of Protraction; for when the Head has advanced pretty low in the *Pelvis*, ſo that there is no longer any dilating Force exerted on the *Os internum*, the Delivery will be retarded, till, by the Diſcharge of the Waters, the *Uterus* has more Power to contract, and propel the *Fœtus*.

If the *Funis* is too ſhort, or entangled round the Neck or Limbs of the Child, it will retard the Labour, by counteracting the Efforts of Nature, in the Protruſion of the Child, which will, at the Remiſſion of every Pain, (which are too ſoon and ſuddenly retracted) be drawn back into the *Vagina*, notwithſtanding it has advanced ſo far, as to give us Reaſon to expect its entire Protruſion, at the Return of every propelling Effort.

In theſe ſhort or cutting Pains, though the contracting Force of the *Uterus* may be completely exerted, the Efforts are fruitleſs, becauſe the abdominal Muſcles, inſtead of compreſſing the *Uterus*, from above downwards, act upon it, in a contrary Direction; to reſiſt which unnatural and inconvenient Preſſure, the Woman

inflates

inflates her Lungs, by a ſudden and ſtrong Inſpiration, which, for that Time, deſtroys the Pain: by a Finger in the *Vagina*, we may generally perceive, on theſe Occaſions, that, though the Head advances in nearly a ſtrait Line; as it recedes, it is drawn back, ſomewhat obliquely, turning as it were upon an Axis, towards the Side by which it is retracted. ——By theſe Circumſtances our Endeavour to aſſiſt the Delivery, muſt be regulated.

When he finds it thus alternately advanced and retracted, the Operator may endeavour to retain the Head in its Poſition, when protruded by a Pain, by paſſing one or two Fingers of the left Hand up the *Rectum*, and making a Purchaſe on the Forehead of the Child, and with a Finger of the other Hand, endeavouring to make a Paſſage for the Waters, if they are not all drained off, which muſt be done, by moving the Head in an oppoſite Direction to that by which it is retracted.

The *Funis* is frequently found, on the Delivery of the Head, once, twice, or three times twiſted round the Neck, which, if not the Cauſe of a tedious Labour, muſt, at leaſt, impede the Delivery, by retaining the Shoulders: as ſoon therefore as the Head is protruded through the *Os externum*, this Impediment muſt be removed, by gently drawing down the String, with one Hand, and lifting up the Head with the other, ſo as to untwiſt it; always being cautious how we handle the String, leſt too much Force ſhould ſeparate it from the *Placenta*, and occaſion a Flooding, of which there is equal Danger,

ger, If the Child ſhould be ſuffered to paſs, before it is diſentangled. A Circumvolution of the *Funis* round the Body of the Child, may alſo, though not in an equal Degree, retard the Labour, and can ſeldom be diſentangled, till the Body is delivered; but if we find the *Funis* drawn ſo tight, as to be apprehenſive of Danger from it, no Inconvenience can ariſe from tying and dividing it, when the Infant's Lungs are once inflated.

The Progreſs of a very promiſing Labour may alſo be protracted, towards it's Criſis, by the ſticking of the Child's Shoulders, either upon the *Pubes*, or againſt the upper Part of the *Iſchium*; or by the Contraction of the *Cervex uteri*, over the Shoulders of the Infant, after the Head has paſſed through it; by which Means the Body of the Child is not only kept up, but the Shoulders are prevented from turning to the wideſt Axis of the *Pelvis*, which otherwiſe they would do. This is frequently an Accident, in Conſequence of a premature Rupture of the Membranes, and may probably be a Cauſe alſo, why the Head does not always advance, on the Evacuation of the Waters, when the *Os uteri* is pretty well dilated: this, however, cannot happen, unleſs the Waters being ſmall in Quantity, have been all protruded in the Membranes, before the Head; a Circumſtance which, I am confident, has frequently occured; as I have ſometimes found the *Os uteri*, which was before the Irruption of the Waters, fully dilated, contract itſelf on that Event, to the Breadth of a Crown-Piece, and to become very thick, and, in ſome Degree, rigid. In

theſe

theſe Caſes, Anodynes muſt be adminiſtered, to relax the contracted Fibres; and, when poſſible, the Head muſt be gently put back, ſo that the Hand may aſſiſt, to dilate the contracted *Uterus*. The Delay, from the Confinement of the Shoulders, lodged tranſverſely at the Brim of the *Pelvis*, will not, unleſs complicated with this Contraction, occaſion any very conſiderable Inconvenience or Impediment, and may, if the *Pelvis* is capacious, be aſſiſted, by paſſing one or two Fingers, on that Side which will beſt admit of it, up to the Shoulder, and giving it a Turn in the Remiſſion of Pain. In theſe Caſes, it is one Shoulder only that makes the Reſiſtance; and as the Head is always low down, before it can be diſcovered to occaſion the Delay, or, indeed, before it can effect it; it will be retracted, (as in the Caſe of Circumvolutions of the *Funis*,) at the Remiſſion of every Pain.

SECT.

SECT. V.

Laborious Labours. ——— Their Cauſes and Conſequences.

WHEN the Pains are very frequent and ſtrong, and the Delivery is notwithſtanding protracted; when the Aſſiſtance of the Hands only will not accompliſh the Work; or when there is no Water protruded, to lubricate and dilate the external Paſſages, the Birth is accounted laborious.

When the *Pelvis* is ſtrait or diſtorted; when the Head is large or ſwelled; when it is obliquely or tranſverſely turned, at the Brim of the *Pelvis*; when the *Os uteri* is very rigid, or when the Membranes are prematurely broken, or are too tough to yield to the Impulſe of the Pain and Waters, thoſe Circumſtances muſt follow.

When the Head of the Infant is the Source of Difficulty, the Waters will moſt commonly diſcharge themſelves, before the *Os uteri* is in the leaſt dilated; there will conſequently be no Progreſs made in the Labour, till the Head itſelf can, by the Force of the Pains, be in ſome Meaſure,

Meaſure, protruded through it, which, if it be not in the moſt advantageous Situation, the Labour will ſtill be the more retarded: Strength and Continuance of Pain, however, will at length accompliſh the Work; the Head, though large, if the Sutures are not too cloſe, will conform itſelf to the Form of the *Pelvis*, and be puſhed below the Point of the *Sacrum*, and lower Edge of the *Pubes*; at which Time Aſſiſtance is required, the left Hand well lubricated, muſt at the Beginning of a Pain, be introduced into the *Vagina*, with the Palm upwards, and the Back preſſed hard againſt the *Coccyx*, to aſſiſt it's receding, and thereby, widen the Capacity of the *Pelvis*. During the Pain, the Hand muſt be gently drawn downwards; as it is preſſed back, the *Occiput*, may be a little aſſiſted, by the two Fore-fingers of the other Hand, if the Forehead be already turned to the *Sacrum*; but if not, the Operator muſt endeavour to effect that Turn, by moving the two Fore-fingers of the Right-Hand, at the *Pubes*, and the two Fore-fingers of the Left-Hand muſt, at the ſame Time, draw the oppoſite Side outwards, from the *Sacrum*; the Woman muſt be directed, to ſtrive with her Pains, by ſtraining as to Stool; and by repeating theſe Efforts, at the Return of every Pain, a very laborious Labour may, in Time, be brought to a fortunate Iſſue.

[*There is Something rather uncouth and ungrammatical in the Term* LABORIOUS, *as applied to a* LABOUR; *yet, as it conveys an expreſsive Idea, and has been long in Uſe, we could not, without*

in-

incurring the Cenſure of Innovation, ſubſtitute any other in it's Room; we might otherwiſe, with more Propriety, have arranged the different Degrees of Labour into five, *inſtead of* three *diſtinct Claſſes; under the Denomination of* natural *and* eaſy; lingering *and* perplexing; difficult *and* perilous; mixed; *and* preternatural LABOURS.]

As theſe Sort of Labours are frequently complicated with the Contraction of the lower Parts of the *Uterus*, and the Circumvolutions of the *Funis*, before-mentioned; the Head will, at the Remiſſion of every Pain, be retracted; to prevent which the Woman muſt be directed to recover her Breath, as the Pains relax, as gradually, and cautiouſly as poſſible; and when the Head is advanced pretty low, it may be very advantageouſly aſſiſted by the *Rectum*; one or two Fingers of the Left-Hand in that Paſſage, may perhaps retain the Head in its Poſition, by making a Purchaſe, on the lower Part of the Forehead, or Top of the Noſe; and as the Pain returns, and advances the Head, a ſecond Purchaſe may be made below the Noſe, and a third below the Chin; after which a ſmall Degree of Aſſiſtance, with the Pain, will puſh the *Occiput* over, and, as it were, round the *Pubes*; at which Time, the Palm of the ſame Hand muſt keep an equal Preſſure, on the Head and *Perinæum* protruded before it, to prevent Laceration; while the other Hand is employed, in lubricating the Parts, and dilating the *Os externum*, and aſſiſting the *Occiput* to force it's Paſſage. In this Operation, Care muſt be taken not to injure the Child's Eyes, or by too long and violent

Preſſure

Preſſure on the Parts, to weaken or bruiſe the *Rectum*.

But the Head will not always advance low enough to admit of ſuch Aſſiſtance, but will ſometimes be confined in the Middle of the *Pelvis*. Under ſuch Circumſtances, if after ſeveral Hours Succeſſion of ſevere Pains, and what little Help we are, in that Caſe, able to afford (which conſiſts chiefly in widening the Capacity of the *Pelvis*, and removing the Reſiſtance from below, by preſſing back the *Coccyx*, and drawing the *Perinæum* outwards and forwards,) the Head does not advance; and that we cannot introduce the Hands or Fingers, ſo as to be of any material Service, it may be neceſſary to have Recourſe to more powerful Aſſiſtance; but the inſtrumental Method of Delivery is never, but on the greateſt Exigency, to be uſed; though, at the ſame Time, great Care ſhould be taken, not to let an Opportunity be loſt, that might preſerve the Life of the Infant, which is frequently in Danger, if the Woman is ſuffered to languiſh too long, and the Pains decline too far.

It is not uncommon for the Face of the Infant to preſent itſelf to the Birth, ſometimes, the Chin to the *Sacrum*, ſometimes to the *Pubes*; and ſometimes alſo, in the upper Part of the right or left *Iſchium*. Theſe are Circumſtances, wherein very little Aſſiſtance can be given; till the Chin can be perceived before the *Pubes*, or turning into the Hollow of the *Sacrum*; for, if in this Caſe, (as they moſt commonly do) the

Waters break off, before the *Os uteri* is completely dilated, the Operator is in Danger of injuring the Features of the Infant, if they are too frequently or rudely handled.

If the *Pelvis* is capacious, and well-formed; if the Pains are ſtrong and profitable, Nature will, in Time, relieve herſelf ſo far, as that, by a little Aſſiſtance under the Chin, and at the *Occiput*, the Patient may be happily delivered; whereas, by an unneceſſary and imprudent Aſſiſtance (eſpecially, if the *Pelvis* is ſtrait, the Pains weak, and the Woman rather languid) we might both injure and inflame the Paſſages, and the Head of the Infant; and by cauſing them to ſwell, conſiderably impede the Delivery; but, if, when the *Os internum* is fully dilated, the Head does not advance, we may conclude there muſt be ſome Impediment above, which, without manual Aſſiſtance, cannot be removed; and the Child muſt, before the Pains are quite gone off, and the Woman too much exhauſted to bear the Fatigue, either be turned, and brought footling, or be delivered by the Forceps; which however cannot, but with great Difficulty, be introduced on this Occaſion; happy it is, that the Neceſſity does not often occur.

When the *Vertex* preſenting fair to the Birth, is advanced ſo low, as for the Head to make it's Turn; it will ſometimes happen, that the *Occiput*, inſtead of the Forehead, turns into the Hollow of the *Sacrum*, by which Means the Face will be puſhed down along the *Pubes*; which being ſo extremely delicate, will admit of no Aſſiſt-

Aſſiſtance; and being in Fact, longer than the *Occiput*, will require more Pains to force it below the *Pubes*; and muſt be farther protruded, before it can, as the *Occiput* does, make a Half round Turn over thoſe Bones, which cannot be, till the Chin is puſhed ſomewhat below them, and the *Occiput* has ſunk into the Hollow of the *Sacrum*. Strength of Pain, and a little Aſſiſtance from the Operator, with the left Hand to preſs back the *Coccyx*, and enlarge the Capacity of the *Pelvis*, and lengthen the Pains; (at the ſame Time directing the Woman to exert what Force ſhe can, in the Manner before mentioned) will, however, produce this Event; after which the Chin being once partly releaſed, a Finger or two may be paſſed up the *Rectum*, to get Purchaſe behind the *Occiput*; and the whole Head will, in a Pain or two, be relieved.

The *Occiput* itſelf will ſometimes deſcend, while the Child's Chin ſhall be bent forwards upon its Cheſt; this, however, is neither a frequent, nor very dangerous Poſition; as the Head, when once the Pains have puſhed it low enough, will eaſily be turned, ſo as to riſe round the *Pubes*, and let the Face fall into its natural Situation, the Hollow of the *Sacrum*.

Now and then alſo, an Ear will preſent itſelf, which will not ſo eaſily be brought forward, as either of the former Poſitions; becauſe, in theſe Caſes, the Head is moſt commonly turned lengthways, acroſs the *Pelvis*, and muſt be put back, and the Child turned; unleſs the Pains

are

are very ſtrong, and have forced it low into the *Vagina*, before the Membranes have broken, and diſcharged their Contents.

In all theſe Caſes, the Aſſiſtance required is nearly ſimilar; and the Patient ſhould neither be ſuffered to languiſh too long without Help, nor be wrought upon too much: the Parts muſt be frequently lubricated, and proper Cordials (and Anodynes, if neceſſary) be occaſionally adminiſtered, to recruit and ſupport her Strength and Spirits.

The *Os internum* will be ſometimes ſo rigid as to require great Force to dilate it ſufficiently to let the Infant paſs: The Waters are, in this Caſe, almoſt always diſcharged before the Labour is much advanced; becauſe the Reſiſtance of the *Os uteri* being much greater than the diſtending Power of the Waters, the Membranes are conſequently broken, almoſt on their firſt Protruſion; this Accident, (as we may juſtly deem it) will, though there may be neither Danger nor Difficulty in the Birth itſelf, render it, however, extremely tedious and laborious to the Patient. On the Part of the Operator, it requires only a little Patience.

To aſſiſt the Dilatation, when it is ſo far opened, as to admit the Entrance of two or three Fingers, the *Os uteri* may, in the Time of every Pain, be gently dilated, by expanding the Fingers introduced into its Orifice, and endeavouring to puſh it gradually over the Head; at the ſame Time dilating and enlarging the Capacity

pacity of the *Vagina*, to admit of the Head's falling down, which will gradually give it more Power to act on the *Os uteri*, and dilate it.

It is poſſible, however, for an Inconvenience to ariſe from the Head's ſinking too low in the *Pelvis*, before the Dilatation is far enough advanced: for it may, in ſome Meaſure, confine the Sides of the *Cervex uteri*, by its Preſſure againſt the Bones on either Side, during the Time of Pain, ſo as not to act upon the Orifice at all, till the *Os internum* can be abſolutely puſhed round it, and over it, either on the Part next the *Sacrum*, or the *Pubes*; to effect which, the Operator muſt, in the Abſence of Pain, puſh back the Edge of the Orifice, with two or three Fingers, and keep it on the Stretch till the Pain returns; during which the Dilatation muſt be aſſiſted as much as poſſible, by forcing it over the *Occiput* or Forehead, according as which Side of the *Pelvis* will beſt admit of ſuch Aſſiſtance.

The *Os uteri* will, on this Occaſion, admit of conſiderable Exertion: but if it be extremely thin and delicate, there will be Danger of Laceration, if the Aſſiſtance given is too rough or partial: the dilating Force ſhould at all Times be as nearly equal as poſſible; except when an Opportunity is likely to be gained of puſhing it over the Forehead or *Occiput*; at which Time it will be leſs liable to Injury, as the Head will then be got far enough through, to make an equal and conſtant Preſſure, at the Return of the Pains, and render all other Aſſiſtance unneceſſary, till the Head is to be relieved from the *Os externum*.

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In theſe Labours, the *Os uteri* will always be found low in the *Pelvis*, and generally back to the *Sacrum*; tho' it will ſometimes be protruded, even to the Edge of the *Labiæ*, and if too great Force of Pain ſhould confine it long in that Situation, or if too much Aſſiſtance of the Operator ſhould partly lacerate, or at leaſt weaken the Tone of its Fibres, the Woman would be afterwards ſubject to a *Prolapſus Uteri*, than which there is Nothing more troubleſome to the Patient, or more difficult to be cur'd; after all ſuch Labours therefore, as ſoon as the *Placenta* is brought away, it would be prudent to paſs the Hand again, and feel for the *Os uteri*, which will, in moſt Caſes, begin to pucker up in a few Minutes after Delivery, and may eaſily be ſo puſhed up, over the *Pubes*, as to prevent its ſinking too low into the *Vagina*. The Patient muſt afterwards lie as motionleſs as poſſible, for ſome Time, and keep her Bed ſomewhat longer than ordinary; and, at her Upriſing, be extremely cautious, not to ſtand or walk too much, or too ſuddenly uſe any heavy Exerciſe or Labour.

* But the moſt material and perilous Cauſe of laborious Labours is the Diſtortion and Straitneſs of the *Pelvis*; of this a very ſuperficial Knowledge of the Structure of the Parts will be ſufficient to convince us.

Where the *Coccyx*, and lower Part of the *Sacrum* only, are diſtorted and curved inwards, ſo as to diminiſh the Capacity of the *Pelvis*, a little

little timely and proper Aſſiſtance, will effect the Buſineſs, though not without Difficulty and Peril: if the Child's Head is not very large, and the Sutures too cloſe; the Pains, if ſtrong, and the Woman is able to ſupport the Conflict, will in Time force it ſo low, that by preſſing back the Point of the *Coccyx*, and at the ſame Time helping the *Occiput* to make its Turn over the *Pubes*, the Infant may be ſafely delivered.——The Head, when locked between the *Iſchia*, may, in the ſame Manner, be ſometimes relieved, though not ſo eaſily or expeditiouſly as in the former Caſe: and ſometimes both will require the Aſſiſtance of the *Forceps*.

In ſome Caſes, where the Head is thus jam'd between the Bones, a Finger or two may be advantageouſly introduced along the Inſide of the *Pubes* and *Coccyx*, or in the *Rectum*, to aſſiſt the Head in its Deſcent, and Turn, during the Pains; and to give the *Occiput* the half Turn over the *Pubes*; which effected, the Sides of the Head will admit of ſufficient Compreſſion, (if not too large and ſolid) to paſs through; but where this cannot be effected by the Hands or Fingers only, the *Forceps* muſt be uſed before the Pains are too far gone, or the Child has received any Injury from the Confinement of its Head.

But the Danger and Difficulty will be much greater both to the Mother and Child, where the lower Vertebræ of the Loins, and upper of the *Sacrum*, are intruded towards the *Pubes*; and the *Pelvis* is thereby made ſo narrow, that the Head of an Infant, unleſs conſiderably

derably under the middling Size, cannot be forced through: for, in this Caſe, the Head will naturally be lodged over the *Pubes*, and will ſeldom, for a long Time, at leaſt, have any Power on the *Os internum*, to aſſiſt the Dilatation, and is alſo too high to admit of any manual Aſſiſtance; and unleſs it be ſmall, or the Sutures are very open indeed, it can never, by meer Strength of Pains, be forced into the Hollow of the *Sacrum*. This is the Caſe, wherein Aſſiſtance of the moſt diſagreeable Nature is ſometimes required: the *Forceps* can hardly ever be fixed to Advantage, the Head being too high to admit of their being properly introduced, and there will ſometimes be a Neceſſity even to deſtroy the Child: yet there have been Inſtances, (where the Head being ſmall, the Sutures open, and the Pains very ſtrong) of the Infant's being forced below this Impediment, and born alive.

It is almoſt needleſs to load the Memory with particular Inſtructions how to aſſiſt, in Circumſtances like theſe; as almoſt every different Caſe will require, in ſome Degree, a different Treatment. In general, the Structure of the Parts muſt be well conſidered, the Poſition of the Head carefully examined, and the Strength of the Pains, and Condition of the Patient, properly attended to: from theſe we muſt judge what Aſſiſtance is neceſſary, and how to apply it to moſt Advantage.

Every other Species of Diſtortion in the *Pelvis* will be equally productive of Difficulty and Peril, in the Time of Labour; and, in all ſuch Caſes,

Caſes, unleſs the Child's Head be very ſmall the Pains ſtrong, and the Sutures very open, as before obſerved, the Life of the Infant will be in imminent Danger; for, by long Confinement in the *Pelvis*, the Parts will ſwell, and the Pains grow languid, and ſometimes wholly relax: the Patient, therefore, muſt be properly ſupported, and where Nature is inſufficient, or the common Methods of Aſſiſtance will not ſucceed, Recourſe muſt be had to more powerful ones, before the Woman is too far exhauſted.

The Confinement of the Child's Head may ſubject the Parts of the Mother to great Tumefaction, and Inflammation; which may either ſuppurate and degenerate into Ulcers, or may mortify, and terminate in Death. On the Part of the Child, the Compreſſion of the Brain, if not the immediate Cauſe of its Death, may ſubject it to Convulſions, or impair its natural Intellects.

It is from theſe Labours, the *Os uteri*, *Vagina*, and *Perinæum*, are moſt liable to Injury; a ſlight Laceration of the *Os internum* may, in a good Conſtitution, re-unite, and be productive of no ill Conſequences, unleſs that of rendering the future Labours more difficult; but if the Injury is conſiderable, it ſeldom admits of any Cure, but generally mortifies, and deſtroys the Patient.

The Septum of the *Vagina* and *Rectum*, will ſometimes alſo, from the Rupture of a Veſſel, or perhaps from a partial Mortification, be perforated; and as the *Fæces* will be continually

forcing through the Wound it will hardly ever be re-united.

Lacerations of the *Perinæum* are ſeldom of ſuch Conſequence as either of the former, but muſt nevertheleſs be always as carefully guarded againſt; a digeſtive Liniment and Cataplaſm will be ſufficient to produce a Re-union of the Parts, if the Wound is not too conſiderable, but if it extends to, or up the *Rectum*, which will ſometimes happen, a Suture or two muſt be made, at proper Diſtances, with a crooked Needle, and the Wounds dreſſed with a mild Digeſtive; and a ſoft Poultice muſt be applied to the Parts.



SECT.

SECT. VI.

Obliquity of the *Uterus*. Prolapsus in the time of Labour, &c.

DAVENTER, who is very copious on that Head, is the first Author who described, and treated on the oblique position of the *Uterus*. SMELLIE in his introduction, affirms that DAVENTER thro' Fondness for his new Doctrine, has led himself into Errors; however, as he allows that Difficulties will arise from a pendulous Belly, he in some Measure admits a possibility of the Fact's happening, as described by DAVENTER; since in that Case, the Womb will in some Degree, be thrown obliquely forward.

It is not impossible however, that from the adhesion of the *Placenta* to different Parts of the *Uterus*, DAVENTER (who is rather of Opinion that it always adheres to the *Fundus*;) might be mistaken, as well as from the Distortion of the *Pelvis*, which had not been so fully considered, as since his time, when the Study of Midwifery has been more dependant on that of Anatomy.

If the *Os Ilium* on one Side, rises higher than on the other, or is more capacious, the *Uterus* will of consequence fall into the most capacious part; and the *Os Internum*, will necessarily be

thrown, by the preponderating Weight of the diſtended *Uterus*, againſt the Bones of the oppoſite Side; in this Caſe, the Obliquity of the *Uterus*, is occaſioned by, and dependant on, the Diſtortion of the *Pelvis*: and 'till the *Os Internum*, can be in ſome meaſure, drawn into the Centre of the *Vagina*, neither the Waters nor Head can exert any Force upon it, to aſſiſt the Dilatation; the Inconvenience, however, occaſioned by this Situation of the *Os Uteri*, may be removed, by only varying the Woman's Poſture: When a *Pelvis* is well formed, the Child will ſometimes lie more to one Side than the other; but I muſt own, I never met with that Difficulty, DAVENTER mentions on that Occaſion. The Labour will, indeed, be rather more tedious, becauſe, as the *Os Uteri* is forced, againſt the Sides of the *Pelvis*, it cannot be properly dilated, 'till it can (as I ſaid before) be drawn more into the Centre; this, however, is not hard to accompliſh, and requires only a little Patience and Attention.

The oblique Poſition, in which the Womb, as DAVENTER deſcribes it, is thrown with its *Fundus* againſt the Spine, and the *Os Internum* over the *Pubes*, cannot be ſo frequently met with, as the lateral oblique Poſitions; and may, more probably than thoſe, be owing to a Diſtortion of the *Pelvis*; for wherever it happens, that the lower Vetebra of the Loins and upper of the *Sacrum*, protrude inwards to the *Pubes*, the *Fundus Uteri*, when diſtended, will conſequently draw the *Os Internum*, cloſe to, and almoſt over thoſe Bones: but the Contents of the Abdomen, can never be ſo far puſhed out of the way, as to admit of the *Uterus* falling back upon the Spine,

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ſo as to occaſion any material Obſtruction in the time of Labour, from an Obliquity that Way.

On the other Hand, when the outer Integuments are very lax; when they have been before diſtended, and therefore, the more readily yield to the Force of Gravidation; or where the upper part of the Abdomen, or the Cheſt, have been too much confined by ſtiff Stays, ſo that the *Uterus*, has not in diſtending, been able to riſe ſo high in the Abdomen, as it would otherwiſe have done: the whole Bulk of the Womb, will be thrown forward, and the Belly become pendulous.

It cannot be denied, that this is indeed, an oblique Poſition of the *Uterus*; and as it does not depend on any Diſtortion of the *Pelvis*, muſt be in itſelf the Cauſe of Difficulty, when it occurs in Labours, where the Belly is pendulous. The *Os Uteri*, will in this Caſe, be found very high in the *Vagina*, and ſometimes quite at the Top of the *Sacrum*: and as in that Situation, the Membranes cannot be protruded through it, ſo as to make any Diſtention or Dilatation; the Pains, will conſequently, though ſtrong, profit very little, until the *Fundus Uteri*, is more elevated, by the external Application of proper Bandages to ſupport the Belly, or by changing the Poſture of the Woman, and aſſiſting with a Finger or two, in the *Os Internum*, to draw that more into the Centre of the *Vagina*, that the Membranes and Waters may be protruded thro' it.

On the firſt touching of a Woman, whoſe Belly hangs thus over the *Pubis*, it will be attended

tended with ſome Difficulty, to introduce a Finger high enough, to reach the *Os Internum*; but when the Finger is once introduced, it will neither be very inconvenient to the Patient, or Operator, to retain it there; and by gently pulling it downwards and forwards, during the time of a few tolerable Pains, a conſiderable Advantage may be gained: to effect this, the beſt Method will be, to touch with the left Hand, if the Patient lies on her left Side; or if that cannot be commodiouſly effected, to turn her on her right Side, and to examine with the right Hand; and it would not be amiſs on this Occaſion, to uſe the two fore Fingers, eſpecially if the *Os Externum* is lax and open.

When the *Os Uteri* is once brought forward, and the Membranes are protruded through it; if the Waters are not too prematurely diſcharged, the Labour will very ſucceſsfully advance, provided the Head meets with no Impediment from above; but if the Membranes are broke, and the Waters diſcharged, before the *Os Uteri* is relieved from its Preſſure againſt the *Sacrum*; the Labour will of courſe require more Aſſiſtance, as the Head will have no Power to dilate it, while it preſſes it againſt a ſolid reſiſting Body, let the Pains be ever ſo ſtrong and frequent. Here then, the Operator may be of infinite Service to the Patient, by keeping a Finger or two in the *Os Internum*, and by preſſing back the Head a little in the Time of a Pain; at the ſame time dilating it, by expanding the Fingers, and drawing the *Os Uteri* forward, towards the *Pubes*, and endeavouring by Degrees to puſh it over the Head. This is a Caſe more troubleſome than dangerous, and affords an Opportunity

portunity to the Operator of diſplaying his Skill and Judgement.

The pendulous Belly, towards the latter End of Geſtation, is extremely troubleſome; but the Inconveniences of it will be conſiderably relieved, by wearing a Napkin, pinned tight over the Hips, to ſupport its Weight.

That the *Placenta* does not always adhere to the *Fundus Uteri*, is a Fact we are now convinced of, from anatomical Enquiries: at the Time that DAVENTER wrote, the Opportunities of diſſecting Bodies proper for theſe Enquiries, were not ſo frequent as they have ſince been, and he might very eaſily be deceived into an Opinion, that whenever he found the *Placenta* adhering to any other part than the *Fundus*, that the Womb was obliquely ſituated; and that the Difficulties he met with, as he was ſeldom applied to, but in difficult Caſes, had wholly ariſen from that Poſition: yet, as he has ſo clearly and accurately deſcribed the Bones of the *Pelvis*, it is ſomewhat ſtrange, he did not attribute thoſe Difficulties to their more probable Cauſe.

To whatever part the *Placenta* adheres, its Weight will undoubtedly occaſion that Region of the *Uterus* to preponderate; or if any of the other *Viſcera* of the Abdomen, are ſo affected by any Diſeaſe, as to reſiſt the uniform Expanſion of the *Uterus*, it will of Courſe be thrown more over to the oppoſite Side; neither of theſe Cauſes can, however, produce any material Inconvenience or Impediment in the time of Labour.

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Notwithſtanding the *Fœtus* preſents with its Head to the *Os Internum*, it may be obliquely ſituated in ſome Degree, independant of any Cauſe, from the Structure of the *Pelvis*, or Deviation of the *Uterus*: but this Circumſtance can produce no Difficulty in the Birth but from the Lodgement of the Shoulders, on which we have already been copious enough.

Women of lax and delicate Habits of Body, eſpecially after having had lingering or laborious Labours, or being much afflicted with the Piles; will ſometimes be troubled with a Prolapſus of the *Vagina*, *Uterus* or *Rectum*; when the *Vagina* is protruded to the *Os Externum*, and the *Os Uteri* is with Difficulty felt near the Top of the *Sacrum*, the Operator muſt be very cautious how he promotes the Labour before the Tumour occaſioned by that Protruſion is properly reduced; which muſt be, by raiſing the Head and *Vagina*, as high as poſſible in the *Pelvis*, and drawing the *Os Uteri* gently towards the *Pubes*, and aſſiſting the Dilatation.

The *Os Uteri*, will be ſometimes alſo, in the Time of Labour, puſhed down to the Edge of the *Labiæ*, and if not properly defended in the Courſe of the Dilatation, may be wholly protruded or at leaſt, injured by Laceration: The Deſcent of the *Rectum*, though inconvenient, will not be of ſuch Conſequence as either of the former: but ſhould be reduced by the Finger at the Remiſſion of every Pain; and particularly, after the Delivery; when it muſt alſo be ſupported by the cloſe Application of a warm Cloth.

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Theſe Accidents may retard Delivery, and make the Birth, in ſome Degree difficult; though they are ſeldom, if rightly managed of any ill Conſequence, either to the Mother or Child.

But the total Subverſion of the *Uterus*, from the too rude Extraction of an adhering *Placenta*, cannot but be productive of the moſt fatal Evils, but as this can ariſe only from that Cauſe, it is needleſs here to enlarge upon it; ſince the Precautions already given for the Performance of that Operation, are ſufficient to prevent our ever being the Cauſe of producing ſuch an Accident.

The Means of Relief, if we ſhould ever be ſo unfortunate, to be conſulted on ſuch an Occaſion, is obvious enough; the Indication of Cure being no more than the returning the *Uterus* by as gentle Means as poſſible; and obſerving the Regimen indicated in all Degrees of Inflammation and Suſpicion of Mortification.

SECT. VII.

Obſtetric Apparatus — Rules for applying the Forceps.

THE earlier Practitioners had no Inſtruments peculiar to this Art, but thoſe of a deſtructive Nature; hence aroſe that general Odium with which the male Practitioners were branded; as it moſt commonly happened, that when Recourſe was had to their Aſſiſtance, the Mother or Child, and frequently both, were to be deſtroyed: and it is indeed, but very lately, that the inſtrumental Method of Delivery has been brought to ſuch Perfection, as to be in many Caſes the certain Means of preſerving the Lives of both the Mother and Child.

When the Head, either from its own Bulk, or from the Straitneſs or Diſtortion of the *Pelvis*, was locked and confined in the Paſſage; there was no Expedient, if it could not be puſhed back in order to be turned, and delivered by the Feet, but that of opening the Head, and extracting, by a Nooſe or blunt Hook; to theſe, ſucceeded the Crotchet, and to thoſe, a Pair of ſtrait

ſtrait Forceps, with Teeth like a Raſp at the Inſide of their Blades, to lay hold of the Skull and draw it along.

Various Kinds of Fillets have been invented and uſed with ſome Succeſs; though they are now, almoſt wholly laid aſide; the moſt common Invention of this Sort, is a Fillet of ſoft Ribbon, or thin Velvet, made like a Sheath and mounted on a thin and pliable Whalebone: where the Child's Head is ſo placed in the *Vagina*, or at, or above the Brim of the *Pelvis*, that the Operator can introduce this Inſtrument, and paſs it over the Child's Chin, and inſinuate it between that and the Cheſt, it may be of Service; when it is once properly fixed, the Whalebone muſt be withdrawn, the Ends of the Fillet tied together, and the Operator muſt make a contrary Preſſure on the hind Head, with the Fingers of one Hand, while he pulls with the other during the Pain; and, by theſe Means a Child that has been for ſome Hours confined in the Paſſages, may be born alive: though it will generally be much hurt, if there is any conſiderable Force exerted in the Operation.

There is an Inſtrument as a Subſtitute for this kind of Fillet; conſiſting of two thin Blades of tempered Steel, covered with Leather, with a Sort of Swivel at the Extrimeties, for the Blades to turn upon; which enables them to fold upon each other; by which Means they can be eaſily enough introduced, and, without Difficulty unfolded, ſo as to make a ſufficient Purchaſe over the Chin or *Occiput*, to aſſiſt the Delivery: this Inſtrument is extremely light and portable, and

will in many Caſes anſwer very well; and is ſometimes preferable to the Forceps.

The *Chamberlens*, who were ſome Years ago the moſt diſtinguiſhed Practitioners of this Art, in Europe; were the firſt, who were in poſſeſſion of the Forceps, which have, ſince their Time, undergone a Variety of Alterations, and improvements, and are even at this time, tho' brought to a very commodious Degree of Perfection, but in a fluctuating State; every Practitioner, endeavouring, according to his own Ideas, to improve, and render them more perfect. *Chapman* gave us the firſt Deſcription of this Valuable Invention, which he affirms, to be the great Secret of the *Chamberlens*: the Alterations and Improvements upon this Inſtrument, were however very immaterial, till Dr. *Smellie*, to whoſe mechanical Genius the world in general, and the Profeſſors of this Science in particular, are greatly indebted, undertook the Taſk; ſince his Time, Dr. *Orme*, has made a very capital Improvement on them; and Dr. *Kelly*, has likewiſe invented a Pair, on a new Principle, and of a very different Conſtruction.

I cannot help obſerving, that one ſiniſter Accident, in the Practice of Midwifery, has been infinitely leſs frequent, ſince the Invention of the Forceps, than before: I mean the Retention of the Head in the *Uterus*, after the Body is delivered; which was frequently, the Conſequence of putting it back, when it was too big to force its Way, and delivering by the Feet; for before this Invention, there was no other Method of

Delivery

Delivery, known or practiſed in thoſe Caſes, but that of turning, or opening the Head.

The Crotchets, were, I believe, the firſt Inſtrument invented, to extract the *Fœtus* by the head; or to make Purchaſe, on any Limb, which could not otherwiſe be delivered; it was formerly, no more, than a ſingle, or double pointed ſharp hook; but the curved Crotchets, with two blades, are of modern Invention; and at this Time, few Practitioners, uſe more, than one, which is made to fit and lock in, with a Blade of the Forceps. It is but very ſeldom however, that there is Occaſion, even for that.

For the Purpoſes of opening the Head alſo, ſeveral ſorts of Implements have been Invented: but the perforating Sciſſars of *Smellie*, are the moſt commodious, they are however, but ſeldom neceſſary, as there are but few Caſes that require the Uſe of Inſtruments, which may not be relieved by the Forceps, and none, that cannot be accompliſhed, by a ſingle Blade of the Crotchets.

To aſſiſt in Breech Caſes, the blunt Hook, has by ſome Writers been ſtrongly recommended: and there is an old Inſtrument called the Crutch, invented to aſſiſt in the Reduction of the Arm, when it was too much tumified from its long Confinement in the Paſſages, to ſuffer the Hand either to return, or paſs by it.

An Inſtrument called a *Tire Tete* was invented and publiſhed, a few Years ago, by *Monſieur Levret*; and ſome of our Engliſh Practitioners

titioners, at firſt, very warmly adopted its uſe, but it is now generally laid aſide; as every purpoſe intended by it, can be as well anſwered, by the Forceps now in Uſe, and ſome Inconveniencies avoided. It conſiſts of three Blades, of thin tempered Steel uncovered, curved almoſt like the Forceps, and riveted at Top on a kind of Swivel; two of theſe turn on an Axis at the Handle; by which Means, the Blades being all introduced at one Time, two are to be turned and expanded, in different Directions, ſo that the Head, may be incloſed as it were, between three ſtrong Fillets. It was at firſt, only intended, for the Extraction of the Head, when left in the *Uterus*; but being applied alſo in other Caſes, the abbraſſion of the Parts, in turning thoſe moveable Blades, and the Inflammation excited thereby, has occaſioned this Inſtrument, to be thrown aſide. *Levret* has alſo a Pair of curved Forceps, which he ſtrongly recommends, but they are very complex, and therefore not ſo generally uſeful as thoſe improved by Dr. *Orme*.

In fine, the Obſtetric Apparatus is now much reduced, and may yet be compriſed in a ſtill narrower Compaſs, as a Pair of Forceps with one Crotchet blade may be made to anſwer every Purpoſe, where ſuch extraordinay Aſſiſtance is unavoidably neceſſary.

The inſtrumental Method of Delivery muſt never take Place, but in Caſes of the utmoſt Peril and Importance; where the Life of the Mother, of the Infant, or perhaps of both, is immediately at Stake; common Reaſon and Humanity would prompt us to the Exertion of every pro-

probable Means; for the Preſervation of either, but where one muſt be ſacrificed, the Queſtion will admit of no Debate.

Before the Forceps or any other Inſtrument is attempted to be introduced, we ſhould convince ourſelves that the *Os internum* is fully dilated; the *Labiæ* and outer Orifice alſo muſt be properly relaxed and lubricated, the Contents of the Bladder (and Rectum if neceſſary) ſhould be evacuated, and we muſt form a diſtinct and certain Judgement of the Poſition of the Child's Head, and the Form of the *Pelvis*: for by theſe Obſervations only, can the Operator be directed in the Uſe and Application of this extraordinary Aſſiſtance.

The lower the Head is advanced into the *Pelvis*, the eaſier the Forceps may be introduced; and whenever the Head thus advanced, is detained, by the Intruſion of the *Iſchia* or *Coccyx*; or by the Remiſſneſs of the Pains; it may by Means of this Inſtrument, be ſpeedily and ſafely relieved: but when higher, the Difficulty will be greater, both in fixing, and delivering with them.

The moſt eligible Method of introducing the Forceps, when there is really a Neceſſity of uſing them, is to paſs them ſo, that the Blades may go on each Side over the Child's Ear, that when locked, the Head may be ſecurely graſped between them, tho' ſometimes a good Purchaſe may be made, from the fore to the hind Head, when it is pretty low in the *Pelvis*, otherwiſe they will be liable to ſlip off: when the Forceps are properly fixed, at every return of Pain, an Effort muſt be made by the Operator, to relieve the

the Infant, by pulling ſtrongly in that Direction the Poſition of the Head, the Poſture of the Woman, and the form of the *Pelvis* ſhall direct; always taking Care, to guard the *Perinæum*; and deſiſt, when the Pain relaxes, that the Woman may not be fatigued, or the Parts injured, by the Exertion of needleſs and unprofitable Force.

Moſt Practitioners, recommend the laying the Woman on her Back, that the Forceps, may the more eaſily be introduced; but tho, this change of Poſture may be ſometimes required, when they are to be introduced, along the Sides of the *Pelvis*, and the Weight of the Woman, has too much depreſſed the Bed, to allow the Hand Room to direct them properly; it will not be always neceſſary, to make that Parade; which ſerves only, to alarm the By-ſtanders.

Smellie, has made himſelf obnoxious to Cenſure, from a too circumſtantial Detail, of the Method of introducing the Forceps, and the moſt convenient Poſture of the Woman; on which, however neceſſary it may be to enlarge in private; in a general Publication, a few Hints of the Expediency of ſometimes, varying the Poſition would have been ſufficient; nor is his Precaution of concealing the Inſtruments, leſs trifling or obnoxious to Cenſure.

SECT.

SECT. VIII.

Caſes that require the Forceps. Inſtrumental Method of Delivery.

WHEN from either of the Cauſes before mentioned, of protracted and difficult Labours, or from the too ſolid Oſſification of its Bones, the Child's Head, is locked in the Paſſages, 'till the Pains remit, and the Woman grows languid; or is, notwithſtanding the ſtrongeſt Effort, retained a long Time in the ſame Situation; or when from the Diſtortion of the *Pelvis* itſelf, it cannot be protruded by the Force of Pains alone, the Forceps will generally, if properly applied, effect the Delivery, without doing the leaſt Injury, either to the Mother or Child.

The firſt material Caſe, where the Forceps may be applied to Advantage, is, when the Baſis of the Skull, is detained at the Brim, and the round hollow Part of the Head, is forced pretty low into the *Pelvis*, and the *Os uteri*, is as it were, wholly Obliterated, by the dilating Efforts, of the Labour Pains.

In this Situation, the Head is ſaid to be locked in the Paſſages, and if the Pains do not advance it, or ſeem declining, and the Woman

begins to looſe her Spirits, to have cold Sweats on her Extremities, or a weak, low, and fluttering Pulſe; we ſhould not delay, the Uſe of an Inſtrument, which always produces a happy Effect, when properly and judiciouſly applied.

The Forceps, may be Uſed with equal Advantage, in all the different Caſes, where the Head is confined between the Bones; whether the Face be turned to the *Pubes*, or *Sacrum*; or to either Side; or when it preſents fair to the Birth; or when the *Occiput*, inſtead of the *Vertex*, is firſt protruded.

They may ſometimes alſo, be of ſingular Service, even before the Head is thus confined: as in Caſes of dangerous Floodings; of ſudden Convulſions; of total Remiſſion of Labour Pains; or when the Funis is too ſhort, or entangled; or the *Cervex Uteri*, is forcibly contracted round the Child.

In all laborious Caſes, except thoſe, ariſing from the Diſtortion of the *Pelvis*, or the Bulk of the Child's Head, when it is not, too far advanced, the Method recommended by moſt Authors is to puſh back the Head, to turn the Child and deliver by the Feet; but this will be attended with no ſmall Difficulty; and will be oftener the Cauſe of the Infant's Death, and of Injury to the Mother, than even the Uſe of the Forceps, where they can be advantageouſly Fixed; and the Danger of leaving the Head in the *Uterus*, ſeparated from the Body, ſhould make us very cautious, how we proceed to that Operation.

Theſe

Theſe Caſes, are more common than thoſe called præternatural; and always require more Skill, and occaſion more Fatigue, both to the Patient and the Operator. Theſe Difficulties and Dangers, are however, much leſs now than heretofore, when the Inſtruments made Uſe of, were not ſo mechanically conſtructed, or ſo well Adapted, to Anſwer the Purpoſes, intended by them. Yet, notwithſtanding theſe favourable Advantages, they are not precipitately to be Employed, where there is the leaſt Proſpect of Nature's being able, to accompliſh her Work.

When the Head preſents fair, the Forehead to the *Sacrum*, the *Occiput* to the *Pubes*, and is low in the *Pelvis*, *Smellie* recommends, the laying the Woman on her Back, and paſſing the Forceps, along the Sides of the *Pelvis*, over the Ears of the Child; to effect which, he directs us, to introduce the Hand, firſt on one Side, and paſs the Blade, between it, and the Head; and then on the other, fixing the ſecond Blade, in like Manner; but this is one Caſe, wherein the Forceps, may be as advantageouſly introduced, to the Forehead and *Occiput*, always remembering, to empty the Bladder by the *Catheter*, if the Woman cannot herſelf diſcharge its Contents; leſt the preſſure of the Inſtrument, in paſſing or extracting, ſhould rupture, or much contuſe it. The laying a Woman on her Back as he directs, is not ſtrictly decent; and carries the appearance of more Force, than need at any Time, be abſolutely exerted. If the Knees

are

are properly diſtended, by the Means of a Pillow, the Operator, will have Room enough to turn the Handles of the Forceps, over the *Pubes*; and the Forehead may be brought down, to the *Perinæum*, without Danger of Laceration; if the Purchaſe is made only in the Time of the Pains, and the Left Hand, be conſtantly kept, to Lubricate and defend it. Nor will the Child's Head, be liable to any conſiderable Injury, if the Forceps are properly Curved, and are not too hardly compreſſed, in extracting. When the Head, is ſo far advanced, that the Neck of the Child can be percieved againſt the *Pubes*, the Forceps may be withdrawn, and the Delivery effected, by the Hands only.

When the Head preſents in like Manner, but higher in the *Pelvis*; the Forehead, reſting on the Top of the *Sacrum*, and the Diſtance between that and the *Pubes*, is leſs than the common Proportion; the Forceps muſt then be fixed, from Side to Side: and if, on the firſt or ſecond Effort, it cannot be Advanced: the Operator muſt endeavour to turn the Forehead, to the Left *Ilium*, to avail himſelf of the Wideſt Axis of the *Pelvis*; to effect this, the Head muſt ſometimes be lifted up, in the Remiſſion of a Pain, and when thus turned, the Forceps muſt be drawn down, in a ſtrait Line at every Pain, till the *Occiput* is drawn down, to the Tuberoſity of the right *Iſchium*, and then the Head muſt be turned again, with the Forceps, ſo that the Forehead, may fall into the Hollow of the *Sacrum*, and the *Occiput*, be brought out, with an half Turn over the *Pubes*.

When

When the Impediment ariſes, from the reſting of the Child's Shoulders, upon the *Pubes*, or againſt the *Sacrum*; the Head, which in this Caſe, is always advanced, very Low, before the Obſtruction can happen; muſt in like Manner, be lifted up, into the Hollow of the *Sacrum*; and turned a little to one Side, and drawn Forward; but if that fail to advance the Birth; it muſt be again raiſed, and turned to the contrary Side, as we cannot diſcover, which Shoulder retards the Delivery; and by this Means, we ſhall be ſure to produce the deſired Effect. Tho' in fact, this Caſe, will never require the Aſſiſtance of the *Forceps*, except when the Pains are wholly relaxed, and the Woman almoſt exhauſted.

When the Forehead is to the *Pubes*, the Ears being then, a little diagonally turned to the Sides of the *Pelvis*, the *Forceps* will perhaps be more readily introduced, if the Woman lays on her Back, with her Breech rather over the Edge of the Bed, and her Shoulders ſupported on a Bed Chair, and a Bolſter or two or three Pillows: the Forceps muſt be paſſed over the Ears of the Child, and the Head raiſed, ſo as to turn the Forehead if poſſible, to the Sides of the *Pelvis*; then, when the Head is Advanced as low as the Edge of the *Iſchia*, the Forehead muſt be turned back, into the Hollow of the *Sacrum*; and to prevent the Shoulders catching at the *Pubes* or *Sacrum*, it may be expedient, to give it a quarter Turn more, that is, to the right *Iſchium*, by which Means, they will be diſpoſed properly to the Sides of the *Pelvis*: and before the Head is attempted to be advanced, the quarter Turn

may

may again be reverſed, and the Forehead being replaced in the Hollow of the *Sacrum*, the Head may be eaſily delivered.

In attempting theſe different Turns, the Head muſt be Occaſionally puſhed up, or drawn forwards, according to the Reſiſtance it meets with; if the Head is ſmall, it may be brought along as it preſents; but if large, there will be great Danger of injuring the Mother, if it is brought along without effecting the neceſſary Turns; becauſe, the Chin will be ſo bent up upon the Cheſt, as to prevent its making a Turn over the *Pubes*, to facilitate the Delivery,

When the Head preſents fair to the Brim of the *Pelvis*, (i. e.) the Forehead to the Left Side; there will be no poſſibility of fixing the Forceps with Eaſe, but by laying the Woman on her Side; and in this Caſe, it will be at all Times, extremely difficult to the Operator, and painful to the Patient, to paſs the Hand up, as *Smellie* directs. Nor is that always neceſſary, if the *Os internum*, be fully dilated, as it always ſhould be, before we attempt to aſſiſt with theſe, or any other præternatural Succours.

It will be more neceſſary however, to paſs the Fingers up within the *Pubes*, to guide the Inſtrument, than on the other Side; as the Bladder, may be more eaſily injured than the *Rectum*; the Handles of the Forceps, muſt be in this, and moſt other Caſes, preſſed back as much as poſſible, to the *Perinæum*; that the Points, may humour the Curviture and Intruſion of the *Sacrum*, and the Form of the Child's Head; which, as

as the Bones are ſo conſtructed as to lap over each other, will without Prejudice, admit of very conſiderable Compreſſion.

When the Forehead of the Child, lies to the Left *Ilium* of the Mother, let her lie on her left Side, and *Vice verſa*; and when the Forceps, are properly fixed and locked, which muſt always be very cautiouſly performed, to prevent the Incloſure of any of the ſurrounding ſoft Parts; they muſt be tied with a Ribbon or Garter, to aſſiſt the Operator, in making an advantageous Purchaſe upon the Handles.

When the Face preſents at the Brim of the *Pelvis*, it ought if poſſible, to be put back; and the Child turned, and delivered by the Feet, unleſs we find the Pains protrude it forcibly, and it does not appear, that the *Pelvis*, is too narrow, to permit it to deſcend: but if after it is pretty far advanced, it ſticks for a conſiderable Time, in the ſame Part of the *Pelvis*; the long Preſſure of the Brain, may deſtroy the Child, if not delivered by the Forceps, or relieved by turning. Yet where the Head, on proper Examination, is found too large or the *Pelvis* is diſtorted, it would be imprudent, to attempt the Turning of the Child, which would very much fatigue the Patient; and the Operator would be in Danger, if he exerted much Force in the Delivery, of ſeparating the Body, and leaving the Head in the *Uterus:* in this Caſe therefore, the Head muſt be ſuffered to advance, as far as it poſſibly can; or the *Vertex*, if Practicable, ſhould be brought to preſent: which would

would enable the Operator, if the Forceps failed, to apply the Crotchet with more Advantage, or to open the Head with greater Eaſe. We are talking now, of ſuch Caſes, as the Force of Pains cannot protrude; or ſuch as give us, no hopes of Succeſs, from attempting to turn; we muſt not however, decide too haſtily, in Caſes of ſuch Importance; for there are many of thoſe Preſentations, which after long Delays, and ſome alarming Circumſtances, terminate happily, by the Aſſiſtance of Nature only.

Whether the Chin be to the *Pubes*, the *Sacrum*, or to either Side of the *Pelvis*, if it advances very low, the Head muſt in theſe Caſes, ſuffer very great and dangerous Compreſſion; and unleſs ſmall, and the *Pelvis* capacious, and well conſtructed, cannot be born alive; the Attention of the Operator, muſt therefore be employed, to relieve it as expeditiouſly as poſſible, conſiſtent with the Safety and Wellfare of the Mother: to Effect which, he muſt, as ſoon as poſſible, bring either the Chin or *Occiput*, without the *Pubes*; which will, by allowing the Head more Room to riſe from the Hollow of the *Sacrum*, facilitate the Delivery: In theſe Caſes, the *Perinæum*, is in the greateſt Danger of Laceration, if too ſudden, or too violent Force is exerted; and the Operator muſt therefore, be very cautious and never forget to guard againſt that Accident, with the utmoſt Care.

The Forceps may in moſt of theſe Caſes, be advantageouſly fixed, ſo as to make a proper Purchaſe, over the *Occiput*, but they will not always be readily introduced, without varying the Poſition of the Woman.

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The Practiſe of Midwifery, has within theſe few Years, been ſo greatly improved, that we have now, very ſeldom Occaſion to have Recourſe, to Inſtruments of a deſtructive Nature: there are indeed, but two Inſtances, that can at any Rate warrant their Uſe; which are, when the *Pelvis* is ſo much diſtorted, or the Head ſo bulky, that it cannot paſs, and the Woman, in either Caſe exhauſted, and in Danger of looſing her Life, if the Delivery be delayed. The Rules already laid down for Introducing the *Forceps*, are ſufficient alſo, for the Uſe of the Crotchet; it will ſometimes however, be prudent to open the Head, before they are applied; this may either be done by the Perforators of *Smellie*, or a Pair of common Probe Sciſſars. We need not be very copious on this Subject, as there are few Caſes, wherein ſuch Proceedings can be really neceſſary.

It is generally recommended in theſe extreme Caſes, to lay the Woman on her Back, ſupported in the Manner mentioned, as ſometimes convenient in introducing the *Forceps*; but the Buſineſs may be as eaſily effected, while ſhe lies on her left Side; as there is no Caution neceſſary, but on the Part of the Mother.

SECT. IX.

Præternatural and mixed Labours.

Præternatural Labours, are diviſible into three Claſſes; firſt, thoſe wherein the Breech, Feet, or lower Parts of the Child preſent, and fall into the *Vagina*, immediately on the irruption of the Waters, and the Head and Arms, are up to the *Fundus Uteri*. Secondly, thoſe where the Arm, Shoulders, or Hip of the Child preſent, and the Waters are not diſcharged; and thirdly, thoſe where either of the latter Poſitions, or the Back, Belly, or Sides preſent, and the Child lies acroſs the *Uterus*, the Waters being all evacuated.

It is common, to include alſo in the ſecond Claſs of Præternatural, thoſe Caſes, which I ſhall hereafter mention, as a Kind of mixed Labours; which are in themſelves, more Dangerous than many of the abſolutely Præternatural, or laborious Caſes.

There is not always much Difficulty, in the firſt Claſs of præternatural Labours; for where the

the *Pelvis* is tolerably large and well ſhaped, if the Breech in particular, falls into the *Vagiina*, before the Membranes are broken, the Child will eaſily be delivered, provided the Face be turned to the Back of the Mother; otherwiſe the Chin will catch on the *Pubes*, and not only retard the Delivery, but endanger the Infant's Life: the Operator, muſt therefore attend to this Circumſtance, and as the Body advances, if the Back of the Infant, is to the *Os Sacrum* of the Mother, turn it ſo that the Face may not be lodged in that Manner. If the Pains are ſtrong, little Aſſiſtance will be required; but if not, we muſt be careful without Violence, to make the moſt of every one, by drawing the Child down, and relieving the Arms and Shoulders, as ſoon as poſſible; to do this, a Finger muſt be paſſed up within the *Pubes* in the Remiſſion of a Pain, and when that returns, the Finger muſt be drawn down, to the Joint of the Child's Arm, which will generally in one Pain bring it forth; and in the next Pain, the other Arm may be brought down, by a Finger paſſed up on the Inſide of the *Sacrum*: this Effected, if the Head doth not immediately follow, a Finger muſt be introduced into the Child's Mouth, and in the time of Pain, gently drawn down, to aſſiſt the Delivery. If in this Caſe, the *Funis* ſhould be confined between the Bones of the *Pelvis* and the Child's Head, ſo as to ſtop the Circulation, its Life, may be inevitably loſt; the Operator therefore muſt be Expeditious, and the Extremities ſhould as ſoon as Protruded, be wrapt in a warm Cloth: and if the *Funis* is entangled in any Shape, around the

Legs,

Legs, Thighs, Neck, or Body of the Child, it muſt as ſoon as poſſible be diſentangled, and covered alſo in a warm Cloth to prevent its growing Cold.

The chief Reſiſtance, when the Head does not readily advance, is by its greateſt Bulk being lodged, betwixt the *Pubes*, and Intruſion of the *Sacrum* and lower Vertebra of the Loins; and not as *Daventer*, and ſome others aſſert, at the *Coccyx*; therefore the giving the Head a circular Turn upwards towards the *Pubes*, and drawing down the Chin with a Finger in the Mouth, will more readily relieve it, than preſſing downwards on the Shoulders, as he directs. When the Head is confined at the Brim of the *Pelvis*, and the Chin is to the *Sacrum*, the *Occiput* over the *Pubes*, a Finger muſt be paſſed up to the left Ear of the Child, and ſliding it along the Chin, may make a Preſſure, ſufficient to puſh the Face to the Left Side of the *Pelvis*; which Axisbeing ſo much wider, will more eaſily ſuffer the Head to paſs, which will generally, make its turn into the Hollow of the *Sacrum*, when it gets low enough to effect it.

When we have Reaſon to ſuſpect, that the Child's Head has not moved with the Body, in giving it the Turn, it may be neceſſary to force it up again, as much as poſſible into the *Vagina*, and to turn it a little more, to diſengage it from the *Pubes*.

If the Pelvis is very narrow and Diſtorted, it will be no eaſy Matter, to bring the Head below the Intruſion of the Spine; but when it has once

ſunk into the Hollow of the *Sacrum*, the Difficulty of relieving it will not be ſo great; a Finger or two of the Left Hand, in the Child's Mouth, while the two fore Fingers of the Right Hand, are expanded, one on either Side of the Neck, with the Thumb in one, and the other two Fingers in the oppoſite *Axilla*, will Effect it; for by this Means, the *Occiput* may be made to riſe up as it were, on the Inſide of the *Pubes*; and the Face and Forehead, to turn down upon the *Coccyx*, whereby the Head will be eaſily brought out at the *Os externum*.

During the whole Proceſs, of this præternatural Extraction, the *Perinæum*, muſt be particularly guarded; and we muſt neither draw down the Infant, with precipitate Violence, or by ſudden Jerks; but endeavour to relieve it, by regular and gradual Movements, from Side to Side. Neither ſhould we be too dilotary, or ſuffer any Pains to remit, without producing their proper Effect; as the Child's Life (eſpecially when the Head only remains,) is at Stake; and may be Sacrificed, to our Indolence and Neglect.

When one, (or both) of the Feet, or Knees, preſent in the *Vagina* or at the *Os externum*, and the Waters are diſcharged, before the Operator is called in, the Taſk will be much more difficult; and if it be a firſt Labour, the Child will ſeldom be born alive: no other Aſſiſtance however, will be required, than what is above deſcribed: when the Arms and Shoulders are relieved, great Care muſt be taken, not to Lacerate the *Perinæum*, in extracting the Head; our

Aſſiſtance

Aſſiſtance as I ſaid before, muſt be equal and cautiouſly exerted; the Child's Body muſt be raiſed, and the *Occiput* turned up within the *Pubes*, ſo that the Face may deſcend from the Hollow of the *Sacrum*, and be brought forth with an half turn, as in the natural Way.

We are generally directed, on theſe Occaſions to place our Patient, on her Back; but in moſt Caſes, it may be done as eaſily, while ſhe lays on her Side; and the varying their Poſture, where an *Accoucheur* is ſent for, after a Midwife has been with a Patient, is rather Alarming to the By-ſtanders, and will ſubject the Operator, to the Cenſure of uſing Inſtruments, where in fact he could not employ them.

When one Foot only preſents, it is moſt adviſeable to paſs the Hand if poſſible by it, and ſearch for the other, but if it is not readily to be found, and the Breech can be brought down by pulling by that Leg only, it is not of much Conſequence, and the Birth may be happily Effected without. Some Practitioners, recommend the paſſing a Nooſe, or Fillet over the Ancles, to aſſiſt on thoſe Occaſions, but there can very ſeldom, be occaſion for any Aſſiſtance but the Hand only.

When one Foot alone ſlips into the *Vagina*, the other is generally, a little Way only within the *Os Uteri*; but by catching on its Sides, or on the *Pubes*, is prevented from falling down: in this Caſe it may be eaſily brought forward; but when it is turned upwards to the Body, it is more adviſeable to proceed without drawing it down, as the

the Attempt perhaps might not be ſucceſsful, and at beſt, would give the Patient a great deal of unneceſſary Pain.

Some Authors, forbid the drawing down the Arms before the Head; but it will more frequently happen, that there is a neceſſity to do ſo, than otherwiſe; for unleſs the *Pelvis* is very capacious, and the Arms are exactly turned into the Sides of it, they cannot poſſibly paſs with the Head; when the Child is ſmall, and the *Pelvis* well formed, they might; but they moſt commonly in ſuch Circumſtances, ſlip down as low as the Elbow at leaſt, without any Aſſiſtance at all: *Daventer* affirms that, the bringing down the Arms before the Head, will endanger its ſeparation from the Body, by the Contraction of the *Os Uteri* round the Neck, or lower Part of the Head; but he is in this Point, certainly miſtaken; for the Head is in general, too far advanced, before we can conveniently relieve the Arms, for ſuch Contraction; which if it could happen, would not have Power to produce that Separation, which can only be the Effect of violent extracting Force, exerted againſt as powerful Reſiſtance; and would neceſſarily, draw out the *Uterus* with the Head, if it were not confined between the Bones.

When the Breech preſents, and is forced into the *Pelvis*, the Legs will very often, be turned up to the Child's Body, and cannot be brought down, 'till the Delivery is effected as far as the Cheſt; in this Caſe, if we find the Face of the Child to the *Pubes*, we muſt, to Effect the neceſſary

ceſſary Turn, puſh the Body up again, as high as the Navel; otherwiſe, the Shoulders will fruſtrate our Attempts; tho' the Legs, will in this Poſture, be ſooner and eaſier Releived, than when turned to the *Sacrum*. If the Breech is detained high in the *Pelvis*, or reſts againſt the *Pubes*, *Sacrum*, or on either ſide of the Brim of the Baſon, it will be moſt prudent, to paſs up the Hand, and puſh it a little back in Order, to draw the Feet into the *Vagino*; but when both Feet cannot be conveniently brought down, it will be ſufficient, to Deliver one only, and as ſoon as poſſible, introduce the Fore Finger of the other Hand, on the Outſide of the Child's Thigh, into the oppoſite Groin; which will make a ſufficient Purchaſe, to deliver the Body. When the Breech, Knees, or Feet, are perceived to preſent thro' the Membranes, before the Waters are diſcharged; the Operator, muſt attend to that Circumſtance, and aſſiſt his Patient immediately on their Rupture, before the *Uterus* has time to contract itſelf, too forcibly, or the Waters are diſcharged, aud run to waſte, which ſhould lubricate the Paſſages, and aſſiſt the Operation. We may generally know, as I have before Obſerved, when a *Fœtus* preſents out of the natural Way, by the Membranes being protruded in an oblong Form, like a ſmall Gut diſtended with Water, or when they are puſhed out large and round, and are puckered up above like a Ball, the *Os uteri*, being very little dilated.

In this Claſs of præternatural, are generally ranked thoſe Labours, attended with dangerous Floodings, either premature, or at the full Period;

riod: ſince in thoſe Caſes, we are not always to wait the Operations of Nature, but muſt ſometimes, even force her, to preſerve the Life of the Mother, perhaps of the Child alſo: there being no Method of ſtopping a Flooding which has baffled the Art of Medicine, but by breaking the Membranes, and diſcharging the Waters; which Diſcharge, producing an immediate Contraction of the whole *Uterus*, ſtops the Mouths of the bleeding Veſſels: if in this Caſe, the Child's Head preſents fair, and the Pains are ſtrong, Nature will in due Time, relieve herſelf; but if there are no good Pains; if the Woman is exhauſted; or if the Breech; or any other Part of the Body preſents; the Operator, muſt immediately proceed, in dilating the *Os uteri*, and ſearching for the Feet, bring the Body along: always being cautious under theſe Circumſtances, to confine the Waters as much as poſſible, as it will be attended with great Difficulty, to turn a Child, after thoſe are diſcharged.

Thoſe alſo which I diſtinguiſh, as a mixed Species of Labour, being neither abſolutely natural or præternatural, are generally ranked in this Claſs; ſuch as when the *Funis* falls down, before the Head; or when the *Placenta*, is over the *Os Uteri*, and the Head, immediately behind it.

The Deſcent of the *Funis* before the Head, is not an uncommon Caſe; and is almoſt always, dangerous to the Infant; ſince the Circulation, may either be ſtopped by Compreſſion, or Cold, if it deſcends ſo low as the *Os externum*, or lays

long in the *Vagina*; the Operator therefore, muſt as much as poſſible, endeavour to put it back, over the Head; which, if the *Os uteri* is ſufficiently dilated, to admit the Ends of two or three Fingers, may be eaſily effected: but as it will moſt commonly be forced down again, by the next Pain, Care muſt be taken, to replace it within the *Uterus*, and keep it there, till the Head advances, and by filling up the Paſſages, prevents its Return. Where there is a large Portion of the *Funis* forced down however, it will not always be poſſible to put it back, or at leaſt to retain it within the *Os internum*; in which Caſe, the Child muſt be turned, and delivered as expeditiouſly as poſſible, to give a Chance of preſerving its Life.

When the *Funis* is thus protruded, the Head moſt commonly reſts at the Brim of the *Pelvis*, or is locked between the *Pubes* and *Sacrum:* and it deſcends generally, behind the *Occiput*; it muſt therefore, to ſecure its Retention be put up over the *Occiput*, and if poſſible, turned in, and lodged within the *Pubes*; the Operator muſt not withdraw his Hand, but keep his Fingers at the *Os uteri*, and dilate it gradually, till the Head falls thro' it, and the Labour advances in the natural Way.

In all præternatural Caſes, the *Funis* is liable to deſcend; and its Pulſation, will always afford us, an unerring Prognoſtic, of the Infant's Life or Death; But we need not except in breech or footling Caſes, pay the ſame Attention to the replacing it, as when it comes down before the Head, as in thoſe Circumſtances, the

Mo ion

Motion of the Child in turning where that is neceſſary, will in all probability, draw it ſufficiently back into the *Uterus*.

Floodings in the Beginning of Labour, are frequently occaſioned, by the Adhæſion of the *Placenta* over, or near the *Os Tincæ*; in which Caſe, the Subſtance of the *Placenta*, will firſt preſent itſelf to the Touch: if it has adhered over the *Os uteri*, the Woman will commonly, have been troubled with conſiderable periodical Evacuations of Blood, from the Time the *Cervex uteri*, began to be diſtended, or at leaſt, the Flooding will commence, as ſoon as the *Os uteri* begins to ſoften and dilate; and will then continue, without Remiſſion, till the Labour advances; which muſt, if the Loſs of Blood is conſiderable, be by all Means promoted; as both the Life of the Mother and Child, may be in Danger from its Continuance.

If from its Adheſion near the *Cervex uteri*, any Part of the Placenta, ſhould protrude thro' the Orifice, before, or at the Side of the Head: it muſt, as much as poſſible, be put back and retained, in the Manner directed, in regard to the *Funis*: but if we have Reaſon to ſuſpect, that the whole Bulk of it is ſeparated from the *Uterus*, or if from its Adheſion over the Orifice, the Loſs of Blood is very conſiderable, and the Woman ſunk or exhauſted by the Diſcharge; the Waters muſt be evacuated, and the Child immediately delivered.

Tho' the *Placenta*, may adhere to the Sides, or even to the *Fundus uteri*, and the *Fœtus* preſent

ſent fair, a Flooding of dangerous Conſequence may be produced, from a partial or total Separation of it, in the Manner before mentioned: when therefore, on the Attack of Labour, either premature or at the full Period, a Flooding continues any Time, and reſiſts the Power of Medicine; or if after long Floodings, there are no Symptoms of Labour; or if there are ſlight Pains, and the Membranes are entire, and Blood is at every Pain forced away, ſo that the Woman is exhauſted by the Diſcharges, the Waters muſt, as in the Caſes before recited, be evacuated and the Child be delivered, as Expeditiouſly as poſſible, to preſerve both that, and the Mother. When the Waters are once diſcharged, the *Uterus* contracting itſelf, round the Body of the Infant, the Mouths of the bleeding Veſſels, are collapſed, and the Violence of the Flooding, is of Conſequence abated: and if the Woman is not too low, and the Child in imminent Danger, the Labour Pains may be waited for with Safety.

SECT

SECT. X.

Second and third Claſs of præternatural Labours. Method of Turning, &c.

THE ſecond and third Claſs, of præternatural Labours, require the turning of the Child, to be delivered by the Feet. The Caſes however, very materially vary, and tho' all thoſe of the third, are extremely Difficult, many that I have ranked in the ſecond Claſs, may be delivered, with leſs Pain and Hazard to the Patient, and leſs Fatigue to the Operator, than ſome laborious natural Labours.

When the Membranes are broken, and any bulky Part of the Child, has ſo pluged up the Mouth of the *Uterus*, as to prevent the total Evacuation of the Waters, the Delivery may be facilitated by them, thro' proper Management: or when the Operator on Examination, finds the Child a-croſs, or out of its natural Poſition; he may by introducing his Arm, as ſoon as the *Os uteri* is ſufficiently dilated; turn and deliver, with Eaſe, Safety, and Expedition; but when he is called to the Aſſiſtance of a Midwife, who has imprudently, ſuffered the Waters to flow off; and the *Uterus* is contracted round the Body of the Child, it will be attended with great danger

Danger and Difficulty, and be very laborious, both to himſelf and his Patient.

When a Child is to be turned; the Operator muſt lay his Patient, in the moſt convenient Poſture for introducing his Hand and Arm; and muſt uſe, either the right or left Arm, as the Circumſtances indicate; ſometimes, it may be neceſſary to lay the Woman on her Back, but it may generally, by a ſkilfull Hand, be done on either Side. The Woman muſt be ſupplied with Cordials, and if much exhauſted, a proper Anodyne muſt be adminiſtered, and a ſhort Reſt procured, before the Operation be performed; which if the Waters are all drained off, will indeed be very laborious: and in this Caſe, it will be extremely ſerviceable, to inject into the *Uterus*, a quantity of warm Oil, either by Means of a pewter Syringe, or a large Clyſter-Pipe and Bladder.

To turn a Child, the Hand and Arm muſt be introduced into the *Vagina* and *Uterus*, as high as the Middle of the Child's Body, or higher if the Feet cannot then be readily found; in this Situation, if the *Ovum* is entire, the Arm filling up the *Vagina*, will prevent the Diſcharge of the Waters, while the Hand in the *Uterus*, is employed, in ſearching for the Feet; which if the *Uterus* is not cloſely contracted round the Body of the *Fœtus*, may be eaſily brought down; the Hand muſt be guided upon one Side of the Spine, but need not go quite ſo high as the *Fundus uteri*; if the Hand can be paſſed, before the Membranes are broken, the Feet may be brought down, at leaſt as far as the

the Middle of the *Vagina*; and if they cannot ſo, be readily found, and the Arm can plug up the Paſſage, to prevent the Diſcharge of the Water, the *Ovum* may be perforated in the Middle of the *Uterus*, and the Feet will then be readily found; if the Head and Shoulders lay pretty near the *Os uteri*, they muſt be gently lifted up towards the *Fundus*, otherwiſe the Infant, if not the *Uterus*, will be liable to Injury, from the complicated Form of its Body.

When the Waters have been long diſcharged, and the *Uterus* is very forcibly contracted round the Child, the Fibres and Veſſels being inflamed, may become Turgid, inſomuch, that by the Exertion of the neceſſary Efforts, for the Turning of a Child, (eſpecially if it lays tranſveſelry, and the Womb is contracted round it like a Sheath, and the Elaſticity of the uterine Fibres, is from Inflammation impaired or deſtroyed, and its whole Subſtance become turgid,) it will be in Danger of being Ruptured: in which Caſe, beſide the Precaution of throwing Oil into the *Uterus*, adminiſtring an Anodyne, and varying the Poſture, as the Circumſtances may ſeem to require; we muſt let an Aſſiſtant keep her Hand upon the *Abdomen*, to make a reſiſting Preſſure, in Proportion to the Diſtention, and re-tumefaction of the *Uterus*, from the Motion of the Child; after which, if the Turning of it appears Impracticable, it muſt in the beſt Method the Circumſtances will admit of, be extracted by the Crotchet; for as in ſuch a Situation, the Infant if not already dead, would probably periſh in the Delivery, our Attention muſt be turned, towards the Preſerva-

tion

tion of the Mother only; but theſe Caſes ſeldom occur, but where the proper Means of Delivery have been too long delayed.

If the Arm preſents, it ſhould if poſſible, be returned and lodged within the *Os internum*; but if it has long lain there, it may be impracticable to return, and we muſt Paſs beyond it; or if it is much ſwelled, and we are ſure the Child is Dead, it may be neceſſary to remove it, in order to make Room, to get at the other Parts of the Body: this is a Circumſtance however, that does not often occur. The Head muſt alſo, be a little puſhed back, and the Operator, muſt paſs his Hand over the Cheſt of the Child, 'till he finds the Feet; and then if poſſible, graſp them both and draw them down, and at the ſame Time, with the other Hand, on the outſide of the *Abdomen*, gently preſs up the Integuments, in a contrary Direction, till the Breech is brought into the *Vagina*; a warm Cloth, muſt then be wrapt round the Legs and Feet, and the Buſineſs is to be compleated, in the Manner directed, in the Proceſs of a Breech Labour.

When the *Funis* comes down immediately on the Irruption of the Waters, and no bulky Part of the Child is immediately perceived to fall into the *Vagina*, we may conclude, that the Child lies a-croſs, and muſt be turned as ſpeedily as poſſible. If the Head, Breech, or Hip, preſent at the Brim of the *Pelvis*, they muſt be put back, and the Child be delivered by the Feet.

When

When the *Funis* comes down, and the Abdomen of the Child, is found to preſent itſelf; it will require Strength and Judgment, to paſs beyond it, and ſearch for the Feet; and the Hand will in this, and moſt other turning Caſes, be ſo cramped, that the Operator will be greatly perplexed with the Pain, but muſt not therefore withdraw his Hand, but only relax a little from his Labour, to recover ſufficient Strength to proceed in the Taſk. The Hip or Back, when either of thoſe Parts preſent, will give the Operator equal Trouble, and put the Patient to as much Pain; and alſo, equally endanger the Life of the Infant: for in thoſe Caſes, the Waters are almoſt always drained off, before the Operation can be proceeded on; and if it is forcibly contracted round the Body of the Child, and has been ſo for any Time, there will be danger of rupturing the *Uterus* itſelf, if the Precaution of injecting Oil, has been neglected, or there is not an equal and conſtant Preſſure, kept upon the external Parts.

In either of the foregoing præternatural Poſitions of the Child, when the Parts, are forced too low into the *Vagina*, to be puſhed back, without Danger of rupturing the *Uterus*, the Delivery muſt be accompliſhed, in the beſt Manner the Circumſtances of the Caſe, on a due Conſideration of the Structure of the Parts, the Situation of the Patient, and the Poſition of the Child, can ſuggeſt to us.

The *Hydrocephalus*, or watry Head, whether it preſents fair, at the Brim of the *Pelvis*,

or otherwiſe, will give the Operator a great deal of Trouble, and can ſeldom be relieved without leſſening the Head, which, if the Child has preſented footling, will not be eaſily accompliſhed: however, when the *Occiput* is brought down to the lower Edge of the *Pubes*, the Perforators may be puſhed up, and expanded in every Direction alternately, to deſtroy the Texture of the Brain, and diſcharge the Waters. When the *Thorax* or *Abdomen* are diſeaſed, and inflated from Putrefaction, or are loaded with Matter or Water, they will alſo, furniſh a Cauſe of Obſtruction; on which Occaſion, their Contents muſt likewiſe be evacuated; which may be done, by puſhing the Finger in at the Navel, or between the Ribs.

Either of theſe however, will be much more eaſily accompliſhed, than the Delivery of the Head, when ſevered from the Body, and Retained in the *Uterus:* an Accident now, leſs common than heretofore; yet, what will ſometimes unavoidably happen, to the haſty, and ignorant Practitioner.

There have been Variety of Methods propoſed, and Inſtruments invented, for Relief in theſe Circumſtances; but as the moſt ſimple, is at all times, the moſt judicious Procedure, I ſhould never recommend the Uſe of any other Inſtrument, than the Fillet, or the Crotchet, locked with one Blade of the Forceps: it will indeed, be ſomewhat Difficult to fix them properly; but as the Patient to be relieved, not the Part to be delivered, is at that Time the Object

Object of our Attention; we ought certainly, to uſe ſuch Means only, whereby the Woman will be leſs expoſed to Injury or Fatigue.

Let the Operator therefore, paſs his Finger into the Mouth, and draw that Part of the Head, as low down as he conveniently can; then, if he cannot paſs up the Crotchet, ſo as to fix it firmly without other Aſſiſtance, he may thruſt his Finger thro' the Integuments, from within the Jaw, to the outſide below the Chin, and paſs a Ribbon or Tape thro' the Perforation; this may be held by an Aſſiſtant, and the Head ſo confined, that he may introduce, firſt one, and then the other Hand along the Side of it, to fix his Inſtruments, without Danger of its receding.

In all this Variety of Operations, it is of the utmoſt importance, to have the Patient placed in ſuch an Attitude, and ſupported by ſuch a Number of Aſſiſtants, as that ſhe cannot retract, or draw herſelf away from the Operator: ſhe muſt be cheriſhed with the beſt Aſſurances we are able to give her, and refreſhed at Intervals, with proper nouriſhing and cordial Drinks; immediately after Delivery, an Anodyne muſt be adminiſtered; ſhe muſt be laid ſtrait and dry in her Bed, be kept very quiet; and by frequent Portions of diluting Drinks, be as ſoon as poſſible thrown into a gentle Perſpiration.

As it will ſometimes happen, that the Practitioner muſt have Recourſe to ſuch Means for the Preſervation of the Woman's Life, as are in themſelves diſguſtful, and in their Conſe-

quences, ſhocking to Humanity; it will be neceſſary on all ſuch Occaſions, to form a Judgement, as early as poſſible, on the Life or Death of the Infant; to preſerve which, it is our Duty undoubtedly, to exert every probable Means of Aſſiſtance, and delay the laſt Reſource, till the Life of the Mother demands our Attention: On the other Hand, it would be as cruel, to let the Patient languiſh in Miſery, a Moment, after the Life of the Infant, ceaſes to be concerned.

If on the Rupture of the Membranes, the Waters are tinged or loaded with the *Mecomium*, we may generally conclude the Infant to be dead: but we muſt not paſs ſuch a Judgement, on the diſcharge of that Excrement, when it happens only after the Evacuation of the Waters. But the moſt certain Judgement in præternatural, is is to be formed on the Pulſation of the *Funis*; or in laborious *natural Caſes*, of the temporal Arteries; on the Ceſſation of which, we may with moral Certainty conclude, that our Attention need only be confined to the Mother.

SECT.

SECT. XI.

The Delivery of Twins, Monſters, and the united Placentæ. The Cæſarian Section.

WHEN on paſſing for the *Placenta*, a ſecond *Fœtus* is diſcovered; if the Head falls into the *Pelvis*, behind the Membranes and Waters, the Pain may immediately recurr, and force it along; but when the Child lies high, the Head being on the *Ilium*, or over the *Pubes*, it is more prudent, to ſearch for the Feet, and deliver: there will ſeldom be Occaſion, to vary the Womans Poſture, or to ſay any thing to her, or the By-ſtanders, till a ſecond Receiver is to be called for.

There is ſeldom, Occaſion to wait, for a ſecond Labour, as is generally recommended, by moſt Authors; the Child's Feet, will very readily be found, and may be brought into the *Pelvis*, before the Membranes are broke; and the Waters will ſo lubricate the already diſtended and yeilding Parts, as to make the Delivery, extremely eaſy. A large Child, or a ſtrait *Pelvis* however are Exceptions to this general Rule.

Tho'

Tho' the *Placentæ* of twins, may ſometimes adhere to different Parts of the *Uterus*, which however, is very uncommon, the *Placenta* of the firſt, will ſeldom be thrown off, till after the Birth of the ſecond Child: (the Membranes of which, or the Parts of the Child, if thoſe are by Accident burſt, in the Courſe of the firſt Labour;) will be immediately perceived, on paſſing the Finger only to the *Os internum*; or if the *Placenta* of the firſt, ſhould be forced along, the Operator, may form an almoſt as poſitive Judgement, by laying one Hand on the Abdomen of the Patient, as he will then feel, if no ſecond *Fœtus* remains, a hard round Tumour under the Integuments, about the ſize of a Child's Head, or rather leſs, juſt above the *Pubes*; but if there be another *Fœtus*, the Tumour will be much larger, not ſo equal or circumſcribed, and will riſe higher in the Abdomen.

Twins generally lay, diagonally in the *Uterus*, one below the other, ſo as not to incommode each other at the *Os uteri*, yet, when the firſt of two or more Children, lies a-croſs, and requires to be turned; the Operator, muſt, when he diſcovers this Circumſtance, be cautious, not to perforate, the Membranous Partition, which ſeparated the Children from each other, leaſt the Delivery ſhould be retarded, by the Limbs of the one, entangling with thoſe of the other. But if ſuch an Accident ſhould occur, he muſt graſp the Feet between his Thumb and ſecond Finger, and ſlide the Fore Finger, up to the Breech, to aſſure himſelf, that thoſe Members, belong both to the ſame Body.

Twins

Twins are produced, by a double Conception, in one Coition; but whenever theſe Principiæ, ſo unite, as to form only one Egg, without the diſtinct Apparatus of ſeparate Membranes, the Conſequence is, the Production of an irregular Body, which will always, be to the Mother a laborious, and to the Operator, a perplexing Birth. They are Accidents however which happily very ſeldom occur.

If the Children thus united, are in themſelves ſmall, the *Pelvis* capacious, if the Woman has before had Children, the Pains are ſtrong, and they preſent with their Feet, it is poſſible, they may be drawn along, and delivered without Separation; but where this cannot be effected, and it is neceſſary to the Woman's Safety, to produce that Separation; the Operator muſt proceed in that Method, the Nature of the Caſe points out, as it is impoſſible to lay down any general Rules for Practice, where there are indeed, but few Examples.

It is needleſs to be prolix, on this or any other Head, which will as ſeldom, fall under the Practitioner's Notice: yet it is highly proper, to be apprized of the Poſſibility, that we may not be deprived by a ſudden Surprize, of that preſence of Mind, which is at all Times, eſſentially neceſſary to the Practitioners of this Art.

It is almoſt as needleſs, to ſay any thing of the Cæſarian Operation; as there are but few Circumſtances, can indicate the Neceſſity of it

it on the living Subject; which are the abſolute Impoſſibility of dilating the *Os uteri*, or of drawing the *Fœtus* thro' the *Pelvis*, either from its Straitneſs or Deformity, or from Diſeaſes and Tumours of the *Vagina*. When a Woman at her full Time indeed, or near it, expires ſuddenly, or is killed by Accident, the Child's Life, may probably be preſerved, if the Operation is inſtantly performed.

We have many Hiſtories upon Record, from ſuch Authority as we cannot doubt, of Women who have ſurvived this terrible Operation; which was perhaps, more frequently neceſſary, before the Invention of thoſe Means, whereby we can now accompliſh the moſt laborious Births: probably this Method, might be practiſed before the Art of turning a *Fœtus* in the Womb, when it preſented acroſs, was univerſally known and eſtabliſhed.

The Operation conſiſts, of a longitudinal Inciſion thro' the Integuments and Muſcles of the Abdomen, the *Peritonæum*, and the *Uterus* itſelf. The Inciſion, is to be made on the Left Side, beginning from the Height of the Navel, but about four Inches further back, and extending, almoſt to the Groin; firſt thro' the *Cutis* into the *Membrana adipoſa*, the *Muſcles* muſt then be ſlowly and cautiouſly diſſected, and the *Peritonæum* alſo, very deliberately perforated, leſt the Inteſtines ſhould be injured: the Womb itſelf, is next to be opened in the ſame Manner, and the *Fœtus*, with the *Placenta* and Membranes, immediately extracted.

The

the Contraction of the *Uterus*, will prevent any conſiderable Hæmorhage from that Part, but the Loſs of Blood from the external Wound will be very conſiderable. The Wound is to be ſewed up with the interrupted Suture, after abſorbing with a Spunge, all the Blood and watry Humours from the Abdomen; and a proper Space muſt be left, for the conſequent Diſcharges, at the lower Part of the Inciſion, which is to be dreſſed in the common Way, and the Patient treated, as after the Performance of any other capital Operation.

For a more circumſtantial Deſcription of the Proceſs of this Operation, *Heiſter's Surgery* may be conſulted; and the Memoirs of the Academy of Surgeons at Paris, for Hiſtories and Caſes.

SECT. XII.

Precepts and Precautions.

DELIVERY is a Natural and truly mechanical Operation, ſuſceptible of geometrical Demonſtration on the moſt obvious and eaſy Principles.

The Knowledge of the mechanical Laws and Progreſs of Labour, is therefore indiſpenſibly neceſſary to all who devote themſelves to the Practiſe of this Art: in fine, an *Accoucheur* without this Knowledge can never be capable of aſſiſting Nature, when any Accident happens to impede the Execution of the fundamental mechanical Principles impoſed by the CREATOR.

The Means of attaining this Knowledge, is to make ourſelves perfectly acquainted with the Circumſtances, which invariably occur in the common Courſe of Labours; as it requires no leſs ſcientific Knowledge to determine when Nature is ſufficient of herſelf, to accompliſh her Work, than to aſſiſt her properly, when ſhe is not.

That

That the Labour may be natural and eaſy, it eſſentially requires on the Part of the Mother, that ſhe be well proportioned, particularly in the *Pelvis*; that the *Uterus*, be conveniently ſituated in the Abdomen, and that ſhe be healthy and not too far advanced in Years: and on the Part of the Child, that it be alive, well Situated, not monſtrous or diſproportionately bulky; that its Head be not too cloſely connected in the Sutures; and that it preſent right.

Nothing is more variable, than the Duration of Labours; ſome will be very ſhort and rapid, others very lingering and fatigueing, notwithſtanding there may nothing extraordinary occur in the Courſe of either. This Variety however, depends on natural Cauſes, which have already been enumerated.

There is the ſame Variety in the different Labours of the ſame Woman, tho' in general, (all things equally conſidered) the firſt Labour is commonly the longeſt and moſt ſevere, unleſs any ſubſequent one ſhould be a præternatural Caſe.

We ſhould therefore, be very cautious in paſſing a Judgement, on the Event of Labours, which are in themſelves too doubtful and precarious to afford any ſolid and invariable Prognoſtic.

Thoſe who Judge from Appearances only, eſteem the precipitate as the moſt happy Deliveries, notwithſtanding the Woman muſt run the Hazard of dangerous Floodings, and conſiderable

ſiderable Lacerations: to the Child however, they are ſeldom productive of any ill Conſequence.

It is the Buſineſs of an *Accoucheur*, to aſſiſt Nature, not to force her, he ſhould therefore, touch but ſeldom at the Beginning, moderately in the Progreſs, and little or not at all, towards the Concluſion, when all goes well, and it is not a firſt Child: to guard the *Perinæum* only, being the moſt material Aſſiſtance required, in an eaſy natural Labour.

It is neceſſary always, in the Touching of a Woman at the Beginning of Labour, to be very cautious, leſt as the Membranes are extremely delicate, the Nail or End of the Finger, ſhould by its Friction, occaſion them to burſt before they can in any degree have dilated the *Os Internum*, which would conſequently retard the Labour, till the Waters were all drained off, and render it lingering if not laborious.

When a Water is prematurely diſcharged, if it be only the outer Membrane, that has evacuated its Contents, the Quantity will not be very large, it will be ſudden, and without much Pain; the inner Membrane, will be ſtill felt ſomewhat diſtended, with Water thro' the *Os uteri*, unleſs it happen early and before the *Cervex* is fully diſtended, and the Orifice has begun to dilate.

When the real Water from the *Fœtus* is diſcharged, the Evacuation will be more copious and continue ſome Time, whether it burſts

in

in the Time of a Pain or without one: the hairy Scalp will commonly be felt thro' the *Os Uteri*; yet we may be deceived, if we are too haſty in forming our Judgement; as the Membranes will not always break in the Centre, or oppoſite to the *Os internum*, but will ſometimes be lacerated within the *Cervex Uteri*, and will lie ſo flat on the Child's Head, and feel ſo ſmooth, that without keeping a Finger upon them for a Pain or two, we cannot determine with Preciſion whether the Water is not to be expected to gather again.

The want of the *Menſes*, in a Woman fit for Marriage is an almoſt certain ſign of Sterility, unleſs the Intercourſe produces them, tho' a Woman may conceive without having ſeen her *Menſes*, if ſhe is near the Period of their appearance when ſhe marries; and a Woman will frequently conceive again after Delivery, without a re-appearance of thoſe Evacuations.

It is not common for Women to have their *Menſes*, during Pregnancy; and all Diſcharges of that ſort, as contrary to the Operations of Nature ſhould be checked; when they have, the Flux is not ſo copious or florid, tho' perhaps regular to the Periods.

When pure Blood or Coagula, are evacuated from the *Vagina*, during Pregnancy, it muſt follow from a ſeparation of the *Placenta*; in the former Caſe, we ſhould bleed near the Period of their approach; in the latter, as ſoon as poſſible, unleſs Labour is actually commenced, under which Circumſtances, it would be of no material Service.

In

In Floodings near the Period of Geſtation it is improper to touch often, for fear of haſtening Labour, unleſs it increaſes to a Degree that requires the rupturing of the Membranes: in theſe Caſes bleed, let the Patient reſt and be well ſupported: in Floodings during the Courſe of actual Labour no Inconvenience will ariſe from touching at any Period: Bleeding is in this Caſe not only unneceſſary, but may be of ill Conſequence.

Very big bellied Women are ſubject to premature Irruptions of the Waters, eſpecially if Fat; thoſe who are not ſo big, are more ſubject to premature Labours; Women much afflicted with the Whites are ſubject to the *Prolapſus Uteri*.

When the Motion of the Child is painful or troubleſome, notwithſtanding the Belly is very big and prominent, it prognoſticates, that the *Uterus*, or Child is Oblique, or that there are more than one Child; or that the Waters are in too ſmall Quantity in Proportion to the Bulk.

The Loſs of Motion in the Child; the Flaccidneſs of the Breaſts, or ſinking of the Abdomen, are not always infallible Signs of the Child's Death; as the Infant will frequently lie dormant, and exert no ſenſible Motion, for many Hours before Labour, and the two latter Symptoms, if accompanied with the Diſcharge of a glary Mucus from the *Vagina*, are ſigns of approaching Labour; but thoſe Symptoms, give Reaſon to fear that the Child is Weak and Languid, if they manifeſt themſelves too

too early or are not accompanied by that Discharge.

In dilating the Parts, we muſt as much as poſſible imitate Nature, by the gradual and regular Intermiſſions of our Aſſiſtance. For tho' too violent and ſudden Preſſure may inflame and injure them, they will always yield to gentle and gradual Efforts, however rigid they may at firſt appear.

When the Child's Head is obliquely turned at the Brim of the *Pelvis*, it may be perceived at the Remiſſion of every Pain, before it is wedged faſt between the Bones, to move itſelf, as if turning to that Poſition, wherein it is leaſt preſſed or hurt.

When the *Pelvis*, (which however but rarely occurs) is wider from the *Pubes* to the *Sacrum*, than from Side to Side, the Head may be advantageouſly turned backwards or forwards.

In a Sanguine and Corpulent Woman, tho' the *Pelvis* be capacious and well formed, if the Child is proportionably luſty and robuſt, its Head will with Difficulty paſs the Brim of the *Pelvis*, (which the Fullneſs and Corpulence of the contained Parts, will in ſome Meaſure retrench) however favourably it may preſent to the Birth.

In ſuch Caſes the contractile and expulſive Efforts of the *Uterus*, are for a long Time too feeble, tho' frequent and fatigueing; and the Delay ariſing from theſe circumſtances, may be productive of many Accidents: for the Confine-

ment

ment of the Head, (in ſuch, or any other Subjects) or the Means made uſe of to relieve it, may occaſion Inflammations, and even dangerous Ulcers and mortifications of the *Veſica*, *Rectum* or *Vagina*, and intermediate Parts; will almoſt always occaſion Lacerations of the *Perinæum*, ſometimes of the *Uterus* itſelf.

Laborious Labours, are more frequent, and often more perrilous, both to the Woman and Child, than præternatural; of all præternatural Labours, the Breech is the eaſieſt and ſafeſt, and is ſeldom attended with any Danger to Mother or Child, unleſs it happens in a firſt Labour; the Hazzard of lacerating the *Perinæum* only excepted.

In all laborious and præturnatural Caſes, our perfect Knowledge of the Structure of the Parts, is of the utmoſt Conſequence, ſince the Bulk and Poſition of the *Fœtus*, as well as the Form of the *Pelvis*, will greatly influence the Nature of ſuch Deliveries.

As the inſtrumental Method of Delivery, is never to be uſed but in Caſes of Extremity; the Precaution of Concealment is unneceſſary, however ſtrongly *Smellie* and other Practitioners, recommend that Conduct; and it would be more to the Reputation of the Operator, to declare that Neceſſity; and refer it to the Patients Friends, either to rely on his Judgment, or to call in the Aſſiſtance of another, for a Conſultation on the Caſe. This Precaution is indiſpenſibly neceſſary, where the Infant's Life is to be Sacrificed.

Previous

Previous to the Uſe of the Forceps, let the Contents of the *Rectum* and Bladder be evacuated; if the Woman herſelf cannot force off her Urine, the Catheter, ſhould be introduced, otherwiſe the Bladder will be liable to an incurable Injury, either in paſſing them, or extracting the Child, if it is any thing diſtended with Water.

The *Os internum*, muſt be fully dilated, and almoſt wholly obliterated, before any inſtruments are attempted to be introduced: they muſt be directed as nearly as poſſible, in an imaginary ſtrait Line, between the Navel and *Scrobiculus Cordis*; and we muſt always guard againſt the too ſudden Delivery of the Head.

The ſudden Delivery of the Child, almoſt always ruptures the *Fourchett*, ſometimes lacerates the *Perinæum*; happily however theſe Accidents are generally healed by the firſt Intention: There are three other Circumſtances that menace a Laceration of thoſe Parts, beſides the inſtrumental Method of Delivery, from which they are always in danger. The firſt is, when the *Occiput* preſents, and the Face as it advances, does not take its turn into the Hollow of the *Sacrum*, or the Opening below the *Pubes*: the ſecond when the Face, and the third, when the Breech preſents, but theſe Situations more commonly retard than precipitate the Delivery.

It is neceſſary to bring out the Head with an half round turn over the Outſide of the *Pubes*, for the Preſervation of the *Perinæum*, which muſt to that End, be ſupported with the Flat of

the Hand, and ſlid gently backwards over the Head. The *Os uteri* muſt alſo be properly defended; and we muſt be very cautious and rather reſiſt the Pains, when the Breech or any other Part is puſhed into the *Pelvis* and the *Os Tincæ*, is very thin and by its Protruſion, in Danger of Laceration.

In dilating the *Os externum*, for the Introduction of the Forceps, if the Right Hand be uſed, let it be turned to the Left Side; becauſe the broad Ligaments and Membranes, that fill up the Spaces between the *Sacrum* and *Iſchia*, will yield and allow more Room for the Fingers to advance: when the Left Hand is introduced, it muſt be turned a little to the Right Side.

And in all Caſes that require the Forceps, when the Head cannot be raiſed above the Brim of the *Pelvis*, or the Fingers be paſſed high enough to aſſiſt the Fixing over the Ears, let the Hand be paſſed up diagonally, along the Space between the *Iſchium* and *Sacrum*, from whence the Inſtrument being introduced along the Hand, may with ſome Difficulty, be puſhed over the Ear, which ſhould if poſſible, be brought by the Hand into that diagonal Poſition: before the Forceps are locked, the Operator muſt be certain that they are high enough introduced to make a proper Purchaſe, and that they are in direct Oppoſition to each other; but if they cannot be puſhed beyond, it may anſwer the Purpoſe perhaps as well, to fix them behind the Ears.

Before

Before he locks the Blades, the Operator muſt be very careful that none of the ſoft Parts of the *Vagina*, or *Os externum* are included in the Joint.

In fixing the Forceps or in turning a Child, the Operator muſt act only in the Remiſſion of the Pain, but in extracting the Child, when either of theſe Manuœvres are accompliſhed, his Efforts muſt be only concordant to the Pains.

In præternatural Caſes, the nearer the Head and Shoulders are to the *Os internum*, or lower Parts of the *Uterus*, the more difficult the Caſe will be: whereas when the Head is towards the *Fundus*, and the Feet or Breech are in the *Cervix uteri*, it may be more eaſily delivered.

In all præternatural Caſes, particularly when the Breech preſents, if the *Fœtus* be a Male, great care muſt be taken not to injure the Scrotum, by Compreſſion, or too much handling, as that Part is extremely delicate and ſuſceptible of Injury.

When a Child is to be turned, the Operator muſt, as diſtinctly as poſſible, inform himſelf from the Circumſtances, of the Structure of the *Pelvis* and Poſition of the *Fœtus*; that he may lay his Patient in the moſt convenient Poſture; and uſe that Hand with which, he can the moſt readily find and extract the Feet.

And to turn a Child with convenience to himſelf and ſafety to his Patient, he muſt firſt inject

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(if the Waters have been evacuated) a quantity of warm Oil into the *Uterus*; he muſt paſs his Hand over the Cheſt of the Child and bring the knees down, along the abdomen, as the Spine will that Way admit of the greateſt and moſt advantageous Flexion; otherwiſe the Infant, if not the *Uterus* it'el', will be in Danger of Injury from the complicated Form of its Body.

In bringing down the Arms before the Head, great Caution i neceſſary, to avoid breaking the Bones, or ſtraining the Joints, by moving them in improper Directions; and if an Accident of that Sort ſhould happen, the neceſſary Means of Relief muſt not be delayed.

The ſame Precaution is alſo neceſſary, in relieving the Legs when they are turned up to the Abdomen as is frequent in Breech Caſes: the Thigh and Shoulder Joints being rotatory Motions, may be moved with care, in almoſt any Direction; but the Knee and Elbow will admit of but one advantageous Flexion.

When the Circumſtances require a Change of Poſture, and the Woman is to be laid on her Back; her Breech muſt be brought cloſe to, or partly over the Foot or Side of the Bed: her Feet ſupported on the Laps of two Aſſiſtants, who muſt alſo as much as poſſible expand her Knees: if the Forceps are to be uſed, the Head and Shoulders may be raiſed on a Bolſter or two or three Pillows; if the Child is to be turned, the Head and Shoulders, muſt lay lower than the Breech, to remove the Preſſure of the Abdominal Parietes on the *Uterus*, and Hand of the

the Operator: proper Aſſiſtants muſt be alſo placed at the Woman's Shoulders, to prevent her drawing back.

In this Poſition, the Operator may ſometimes acquire more Room to introduce the Forceps, and be better able in præternatural Caſes, to extricate the Child's Head, when it falls into the Hollow of the *Sacrum*.

The Life of the Infant is only to be Sacrificed to preſerve that of the Mother; nor ſhould the moſt eligible Inſtruments be employed, but in Caſes of the utmoſt Emergency, or without the Knowledge and Conſent of the Patients Friends.

The Protractions of Labour, depending on Cauſes not to be influenced by the Power of Medicine, further than the general Relaxation induced by Opiates, we muſt never (with a View of promoting Labour) Adminiſter any, but ſuch mild Cordials, as may give a gentle Stimulus, without irritating the nervous Syſtem too much; or exciting a febrile Commotion in the Blood; as all uterine Specifics, as well as the more powerful Cordials and volatile Medicines will do; which being chiefly calculated to affect the Celerity of the Circulation or Tenacity of the Fluids, if they are given Time enough to produce any, it' muſt be a bad Effect.

SECT.

SECT. XIII.

Conſequences of Delivery.

IN conſequence of the Separation of the *Placenta* from the *Uterus*, a Diſcharge of Blood will naturally follow, till by the Contraction of the *Uterus*, the Mouths of the bleeding Veſſels are collapſed: and this Diſcharge, will be more or leſs copious, and continue a ſhorter or longer Time, in Proportion as the Veſſels have been more or leſs diſtended, as the Conſtitution, is Plethoric or Cacheetic, or as the Blood is itſelf, in a tenacious or ſolluble State. This Diſcharge continues, from three to ſix Days, decreaſing in Quantity, and declining in Colour, till from a Florid, it becomes a purulent Diſcharge of Matter; which according to the Conſtitution, will alſo, vary in Colour, Conſiſtence, and Odour. Theſe Evacuations, muſt be always moderately promoted, not that ſuch a Diſcharge is neceſſary to the Conſtitution, but to the Contraction of the *Uterus*; which can by no other Means, be reduced to its natural un-impregnated State.

In the Term of Art, this Evacuation, is called the *Lochiæ*; by Women in general, the *Cleanſ-*

ings;

ings; but the latter Diſcharges, when deprived of the Red Colour, they diſtinguiſh, by the Name of Green Waters. The Retention of the *Lochiæ*, particularly of the Florid kind; is attended with many ugly, and dangerous Symptoms, chiefly ariſing from the Deſtruction of the *Uterus*; which on the Birth of the Child ſpontaneouſly contracts itſelf, and from the Moment of the total Expulſion of the *Placenta* and Membranes, continues to Contract, till it diminiſhes again, to the original Size before Impregnation. But if by the Suppreſſion of theſe Diſcharges, which coagulate in its Cavity, the Contraction of the *Uterus* is reſiſted and delayed, the nervous Fibres are painfully irritated and inflamed, whence a Fever ariſes, and continues till by the Return of the *Lochiæ*, the *Cauſe and Symptoms* are removed together.

As the Orifice and Neck, contract ſooner and more forcibly in Proportion, than the *Fundus Uteri*; the Blood which flows from that Part, whence the *Placenta* was ſeparated, is frequently retained till it coagulates, and is protruded in a ſolid Form, generally on the firſt Attempt to empty the Bladder, but are ſometimes retained longer.

By repeated Diſtentions, the Tone of the *Uterus*, and the elaſtic and contractile Power of its Fibres are weakened: whence the Expulſion of thoſe coagulas, (which are alſo from the ſame Cauſe ſooner and more copiouſly accumulated) is attended with periodical Pains, reſembling thoſe of Labour: and exite an Effort, which may be (not improbly) compared to a

Uterine

Uterine Teneſmus: theſe are called *after Pains*; and every Woman, is more or leſs afflicted with them; after every Birth but that of the firſt Child. And ſome Women, of lax and delicate Habits, whoſe Fibres have partly loſt their Elaſticity; or ſuch in whom the *Uterus* in a firſt Pregnancy, has been greatly diſtended; will be troubled with them, even after the firſt Labour. Theſe Pains may with ſafety be mitigated, but muſt never be wholly ſuppreſſed; as they are not to be looked upon, as Symptoms of a Diſeaſe, but as the Efforts of Nature only, to reſtore a diſtended *Viſſeus*, to its inert and dormant State. All Anodynes therefore, which are adminiſtered to mitigate or ſtifle thoſe Pains, muſt be blended, with *Uterine* and *Emanagogue* Medicines.

The Elaſticity of the *Uterus* itſelf, depending in a great Degree, on that of the many Veſſels whereof it is chiefly conſtructed, the protracted and præternatural Diſtention of it, from any Cauſe of Relaxation in its Fibres, being complicated alſo, with the ſame Debility, in the Sanguiferous Veſſels, opening into its Cavity, at the Part, whereto the *Placenta* adhered: the diſcharge of Blood, will be very copious, and ſometimes endanger the Life of the Woman; this Flooding, is therefore, by all Means to be checked; and we are not to rely on Medicine only, ſince the ſpeedy Cure of this Malady, can only be effected, by refrigerating and topical Applications; ſuch as, applying Cloths dipt in cold Vinegar and Water, to the *Labiæ*, and over the *Abdomen*; or ſtriping the Bed Cloths off, and leaving the Patient only

only covered by a Sheet, to the Effects of the Air, to render which the more Powerful, the Windows and Doors of the Chamber, may be ſet open; this Method, by making the Body ſhiver with Cold, conſtringes the Mouths of the bleeding Veſſels, produces a ſpontaneous Contraction of the *Uterus*, and coagulates the Blood, already in its Cavity; which tho' it may hereafter give Pain on its Expulſion, prevents for the preſent, any further Diſcharge; and will when all other Endeavours have failed, and there is not Time to wait, for the ſlow Operation of ſtyptic Medicines, put a Check to the moſt alarming Diſcharges of this Nature.

When the *Os* and *Cervex Uteri*, are conſiderably contracted, and the Orifice is obſtructed by a Coagula, ſo that the Blood ſtill iſſuing, from the Part, whereto the *Placenta* adhered, is retained in the *Fundus*; it is not impoſſible, that it may again yield to the Force of Diſtention, and an internal Flooding, may happen tho' no Blood is apparently diſcharged, which will occaſion the *Syncope*, and other bad Symptoms, produced by the moſt copious and viſible Evacuation.

From the Blood thus diſcharged, or accumulated, the Heart not receiving its due Proportion of circulating Fluid, its ſpontaneous Motions, become for a Time, weaker and leſs frequent; the *Viſs Vitæ*, is impaired, thro' the whole Machine, till by removing the Cauſe, the Effects alſo gradually diſappear; in this Caſe therefore, the Obſtruction is firſt to be removed, from the *Os internum*, and the Contraction of the *Uterus*,

 aſſiſted

aſſiſted by wet Cloths, ſpread on the Tumor in the Abdomen, and the Application of proper Bandages round the Body.

Nothing is more frequent, than ſlight faintings after Delivery, when the Diſcharges have even been moderate only; but theſe are of no Conſequence, unleſs the Pulſe ſinks, the Extremities grow cold, and a clammy cadaverous Sweat, and palid Countenance, overſpreads the Face, and the nervous Syſtem, is ſo affected, as to throw the whole Frame into a tremulous Agitation: theſe indeed are with Difficulty removed, and require the frequent Aſſiſtance, of warm and nouriſhing Cordials; but the ſlighter Faintings, where the Pulſe ſinks but little, and the Colour remains, are eaſily enough removed, by the common Methods, with Volatile Salts and drops, or a ſmall Draught of cold Water mixed with Wine.

During the whole Time of *Uterine* Geſtation, the *Os* and *Cervix Uteri*, act as Antagoniſts to the Body and *Fundus*; in the ſame Manner, as the ſphincter Muſcle of the Bladder, is an Antagoniſt to the *Muſculus detruſſor Urinæ*; which has not Power to overbalance the Sphincter, till diſtended to a certain Degree: without this peculiar Mechaniſm, the Fruit of the Womb, would oftner be thrown off, before it arrived to its proper Maturity: and hence it happens, that when the *Cervex uteri*, has been weakened by frequent Abortions; that it is Difficult, for a Woman to recover ſufficient Strength, to carry her Burthen to the Period of Geſtation.

From

From the Moment the Labour commences, the *Fundus* and Body of the *Uterus*, become on the other Hand, as powerfully Antagoniſts, to the Neck and Orifice: the Contraction of the *Fundus*, aſſiſts the Dilatation of the *Os Tincæ*, by the Protruſion of the Membranes, or Head of the *Fœtus*: and continues its propeling Efforts, not only till the Child, but the Secundines alſo, are protruded: but if on the Expulſion of the Child, the *Os* and *Cervex Uteri*, too ſoon recover their contractile Power, and overbalance the Elaſticity of the *Fundus*, (which as neither of them ſuffer an equal or ſo long Diſtention, they moſt commonly in ſome Meaſure do) and if at the ſame Time, any Part of the *Placenta* adhere, ſo that it is not immediately protruded, on the Birth of the Child; the whole Secundines, if not readily aſſiſted, may be ſo confined by this Contraction, as to require a freſh Dilatation of the *Os internum*; which would be attended with great Pain and Fatigue to the Patient, and might alſo, till delivered, be the Cauſe of a conſiderable Diſcharge of Blood.

From this Fact, the Truth of which I have often experienced, I would always recommend, the Delivery of the *Placenta*, as ſoon as it can be accompliſhed, without doing a Violence to Nature, or encreaſing the Pain, and Anxiety of the Patient.

SECT.

SECT. XIV.

On the Coming of the Milk; the Structure of the Breaſts; the lactiferous Ducts and Veſſels.

ON the third Day after Delivery, the Breaſts begin to be turgid and painful, a Fever is excited, by the extraordinary Diſtention of the lactiferous Veſſels, and the Conſtitution labours under the Inconveniencies, of a temporary Plethora, till the ſecond Secretion and Depoſit of the Milk are compleatly accompliſhed, and its Evacuation promoted from the Breaſts: for on this Occaſion, there are two diſtinct Secretions of the ſame Nature, to be performed and ſupported; firſt, the Chyle from the Aliment in the Inteſtines; and ſecondly, the Milk from the Blood, in the Glands and Veſſels of the Breaſts.

The Subſtance of the Breaſts is glandular, with a Quantity of Fat, contained in the Cells of the ſame Sort of reticular Membrane, which ſurrounds the whole Body: the *Pelliculæ* of which, ſupport a great Number of Blood Veſſels, Lymphatics, and lactiferous Ducts; and Furniſh a thick, flat, membranous Covering, to each ſeparate Gland, which alſo connects the whole Body of the Breaſt to the Pectoral Muſcle;

cle; and likewiſe a thinner membranous Integument, which lies immediately under the Skin.

Each glandular Body, is furniſhed with Veſſels from the *Mammary* Veins and Arteries, which ariſe from the *Subclavian* and *Axillary* Veſſels. The whole Body of the Breaſts, is interwoven with nervous Fibres, from the *Coſtales*, which communicate with the Fibres of the great ſympathetic Nerve.

Each Gland has its ſecretory and excretory Veſſels, by Means whereof, the Milk is again ſecreted from the Blood, for the Nouriſhment of the Infant; the excretory Veſſels, are chiefly collected into a whitiſh Maſs, called lactiferous Ducts, narrow at their Origin from the Glands, broad in the Center, and contracted again as they approach the Nipple, where they anaſtamoſe, and are reduced to the Number of eight or ten porous Apertures, thro' which as many diſtinct Streams of Milk, may be ſeen to flow on Preſſure, from the Breaſt of a Woman who gives ſuck, and is eaſily milked.

The Nipple, is a ſmall Florid Tubercle, of a ſpongy Texture, capable of Erection on Sucking or Titulation; it contains a Number of elaſtic, ligamentous *Faſciculi*, which with the lactiferous Tubes, are ſo wrinkled and folded in their Courſe, as to admit of great Elongation; and by their tortous Contraction, prevent an involuntary and ſpontaneous Diſcharge of the Milk: it is from this Structure, that the Sucking of the Infant, or the Preſſure and Elongation

ation of the Nipple, by the Hand only, promotes that Diſcharge, by ſtraitening the Tubes, (whoſe tortous Folds perform the Office of Valves,) and exciting a propelling Force and Effort from behind.

Round the Baſis of the Nipple, is a circular Diſk called the *Areola*, containing a great Number of ſmall glandular *Molliculæ* of the Sebaceous Kind, which are very viſible even on its exterior Surface; and from theſe Glands, ſometimes, a Fluid or ſebacious Humour may be expreſſed. In the Virgin State, and till after Conception the *Areola* is very Florid, in the Pregnant, grows darker coloured and duſky; after Delivery it grows again redder, but hardly ever reſumes its bright Colour as in the Virgin State.

The Nipples are in ſome Women ſo drawn in, that they ſeem to be buried as it were, in the Subſtance of the Breaſts, and when by Force drawn out, immediately contract themſelves, ſo as to render ſuch Women incapable of giving Suck; this ariſes, from the too powerful Elaſticity, and too deep Foldings or Contortions, of the Fibres and Veſſels.—The old Women, under theſe Circumſtances, generally ſay, that the Strings of the Breaſt cannot be broken: by which Term of breaking the Strings, they diſtinguiſh the firſt Efforts for promoting the Diſcharge of the Milk. It is a Phraſe however, that conveys no determinate Idea.

The Chyle is ſecreted from the Aliment chiefly in the ſmall Inteſtines, by Means of an innumerable

innumerable Series, of ſmall lactiferous Veſſels; which abſorb the finer, and more nutritive Parts, of our Food, when digeſted in the Stomach and firſt Paſſages; theſe paſs thro' a Number of ſmall Glands, ſcattered up and down, upon the *Meſſentary*; and uniting into larger Veſſels, run along that Membrane, to a Cyſt called, *Receptaculum Chili*: from whence, it is conveyed along the *Thoracic Duct*, and from thence diſtilled, drop by drop, into the left *Subclavian* Vein, and incorporated with the Maſs of Blood.

Hence, tho' the principle Blood Veſſels of the Breaſt, ariſe from the *Subclavian* and Neighbouring Veſſels; no Chyle can be immediately conveyed to them, but muſt paſs thro' the whole Round of the Circulation; and be again ſecreted from the Blood; and the Spontaneous Production of Milk, in the Breaſts of a Woman who gives ſuck, on ſwallowing a Warm and Copious Draught, is the Conſequence only, of an accellerated Circulation.

Every Veſſel of the Human Body, is ſo conſtructed, as to be capable of great Diſtention, in Conſequence of which, the Quantity of Humours depoſited in any one Part of the Frame, may be occaſionally proportioned to the Neceſſities of the Œconomy, and ſometimes encreaſed, to the Production of Diſeaſes.

The Preſſure of the Gravid *Uterus* on the *Aorta*, impeding the Circulation in ſome Degree, in the lower Extremities, occaſions a larger Quantity of Blood to flow in a given Time, into

into the upper Ramifications; and the Veſſels of the Breaſts, are diſtended and encreaſed in their Diameter, by the Impetus, and encreaſed Quantity of the Fluids; whereby, the glandular Structure of the whole Breaſt is augmented, and its ſecretory Organs ſet in Action, which Action, being ſupported by the Nature of the Suſtenance taken after Delivery, by the Inclination of the Mother, and by the Suction of the Child; the Veſſels will continue to be diſtended, and the Secretion carryed on, till by the Application of repelling and conſtringing Medicines, or from ſome Fault, or Alteration in the Habit, the Parts contract, and recover their Tone again.

And as from this Encreaſe of Nouriſhment carried to the Parts, the adipoſe Cells of the Breaſts, will be conſequently more copiouſly ſupplied and diſtended, the Breaſts of Women who have borne Children, will ſeldom become ſo ſmall again, as they were in the virgin State. Tho' from the frequent Repletion, and Repulſion of the Milk, in thoſe who have often given ſuck, their Texture will become more looſe and flaccid, and the Integuments, will at length, be conſiderably wrinkled.

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COMPENDIUM, &c.

PART III.

DISEASES.

SECT. I.

Diſeaſes peculiar to Women.

WOMEN, from the Delicacy of their Frame, are expoſed to various Inconveniencies, which the more robuſt Conſtitutions of the Male Sex, are not ſubject to: for (as *Van-Sweiten* ſays in his Commentaries on *Boerhave*,) it is certain from Anatomy, that the Body of a Woman is, *Ceteris paribus*, much ſofter than that of a Man: The Creator having ſo diſpoſed their Bodies that they might admit of being greatly diſtended without much Detriment, to the End that they might contain, and noturiſh the *Fœtus*, and accumulate the Menſtrual Plethora.

This Delicacy of Frame, expoſes them to the whole Train of Diſeaſes conſequent on Relaxation; but the general Source of their peculiar Maladies, is the fluctuating State of their menſtrual Evacuations: which from the ſlighteſt Effects of Cold, or other ſpontaneous Cauſes, may be obſtructed or totally ſuppreſſed; and from very inconſiderable accellerating or attenuating Cauſes, ſo augmented in Quantity, as to weaken and impair the Conſtitution.

Obſtruction of the *Menſes.*

Obſtructions from Cold or other ſpontaneous Cauſes, being chiefly the Reſult of a Lentor or Thickning of the Blood, are in the Beginning, eaſily removed, by the common Evacuations, and Antiphlogiſtic Remedies: but when neglected, or ariſing from a Relaxation of the Conſtituent Fibres of the Uterine Veſſels, (which of Conſequence impairs their Elaſticity, and diminiſhes their expulſive Power) and the Menſes have flowed irregularly, or ſparingly for ſeveral repeated Periods, the Cure will be perplexing and Difficult.

From the firſt of theſe Cauſes, a temporary acute Fever will be excited; from the latter, an irregular Hectic; the Appetite from both, will be depraved, and the Retention of the redundant Blood, will alſo excite all the Symptoms of a Plethora, and occaſion a Languor, a Senſe of Weight, a Paleneſs of Complexion, a Pain of the Loins, and in the Groin, and a Depravation of almoſt all the natural, vital, and animal Functions.

When

When the Menſes flow irregularly, or in too ſmall Quantity, they are generally attended with acute Pains, to mitigate which, it may be neceſſary to blend Narcotic with the Emmenagogue Medicines, but we muſt not forget, that Opiates will ſometimes counteract the Intentions of Cure, if too freely adminiſtered. When they have been long ſuppreſſed, the Menſtrual Redundancies, have ſometimes diſcharged themſelves, by the Noſe, Ears, or Salival Ducts, from the Stomach or Lungs, through the Pores of the Skin, or from Wounds and Ulcers; or otherwiſe, the accumulated Blood, ſtagnates in the Viſcera, and partly by its Putrefaction, and partly from the Injury it does the Veſſels, produces an almoſt infinite Number of Diſeaſes.

Tho' it is probable, theſe Effects, may be produced, by a relaxed State of the Fibres, or a Lentor of the Blood, it is not impoſſible, that they may ariſe, from a Rigidity of the Fibres, or too powerful Contraction of the uterine Veſſels: it is neceſſary therefore, to inform ourſelves properly, of the proximate Cauſes of the Effects to be removed, whereby we can alone, with a Proſpect of Succeſs, be directed in the Application of neceſſary Medicines.

Bleeding may at all Times be ſafely premiſed; and it may perhaps be more ſucceſsful, if the *Saphena* be opened, near the Time the Menſes ſhould Appear: macerating the Feet in warm Water, will contribute not a little, to the deſired Effect: in the ſlighter Obſtructions, or irregular Diſcharges, the common Purgatives, with Challibeates and aromatic Bitters, may ſuffice.

In

In obſtinate or continued Suppreſſions, the Aloetic Purges with Calomel, and the more powerful Emmenagogues will be required. Dr. *Mead* enlarges on the Virtues of *Tinct: Melampodii*. The French apply Leaches to the Inſide of the Thighs or Labiæ Pudendæ, the Patient at the ſame Time, ſitting over the Steam of Water, or Decoctions of the uterine Herbs: in obſtinate Obſtructions, there is not perhaps a more powerful Remedy, than the Infuſion of Horſe Raddiſh, I have ſeen a Cure effected by that, when every other Medicine had been uſed without Succeſs.

The Menſtrual Flux, as a critical Alteration of Nature, moſt commonly begins, about the fourteenth and continues till near the forty eighth Year, but ſometimes anticipates, and ſometimes exceeds that Period. Yet ſome few there are, who have not that regular Evacuation, and yet enjoy a tolerable good Share of Health: in ſuch, it is not prudent to force Nature, who may perhaps in Time, produce the Effect.

In Obſtructions and Suppreſſions of the Menſes, the curative Indications are, to ſtrengthen the Digeſtion, and rectify the Chylification; to correct the Crudities of the Blood, with Volatile, ſaline, and aromatic Medicines; to remove the Viſcidity of the Humours which obſtruct the uterine Veſſels, and laſtly, to direct the Courſe of the Blood to thoſe Parts, by ſuch Medicines of the ſtimulating Kind, as are known to produce ſuch Effects; which ſhould always if poſſible, be adminiſtered at the expected Periods; or if thoſe cannot be preciſely aſcertained,

certained, we may be directed by certain Emotions in the Blood, producing Nauſeas, Pains in the Loins, and other plethoric Symptoms. *Pitcairn* recommends Mercurials, but theſe as well as Chalybeates, as they act by Acceleration, muſt be adminiſtered with Judgement, and are both improper in hectic Conſtitutions.

Immoderate Flux of the *Menſes*.

This Evacuation, is ſometimes alſo, augmented into a Diſeaſe, either from a relaxed State of the Solids, or an accellerated Motion of the Fluids; but is not imprudently to be checked, unleſs it produces troubleſome and alarming Symptoms; as a weak and languid Pulſe with a Degree of Heat, Want of Appetite, Crudities from Indigeſtion, and Loſs of Strength; a Weight about the Gaſtric Region, an ill Colour in the Face, and œdemetous Swellings in the Feet, or a diſturbed and unrefreſhing Sleep.

Sometimes, at their uſual Period, the Menſes will flow with an Impetuoſity, or in ſuch Quantity, as to threaten the Conſtitution with the worſt of Conſequences; ſometimes they Return at frequent and irregular Periods, or continue ſome Days longer than they ſhould do; and are accompanied with very ſevere Pains in the Loins, and over the Pubes; if the Diſcharge is very Florid, it ſhould be immediately checked; if Grumous, Viſcid, or accompanied with Coagula, the *Uterus* muſt be firſt purged, and the Uſe of Stiptics delayed if poſſible, till thoſe Symptoms diſappear.

Theſe

These Evacuations, are eaſily regulated by the *Cortex*, or a Compoſition of Rhubarb, Allum, and Dragon's Blood, either in Powders, Boluſſes, or in Form of an Electary, waſhed down with Tincture of Roſes, or Red-Wine Negus, either of which, may be uſed for common Drink: or the *Pulvis: e: Succino: Comp:* and a Decoction of the *Ligni Campechenſe*, which is a Remedy that in this, or any other Hæmorhage, ſeldom fails.

Chloroſis.

The Chloroſis or green Sickneſs, is chiefly peculiar to Virgins, at or about the Age of Puberty, whoſe Menſes have not yet appeared, or flow with Difficulty, or in too ſmall Quantity: the Conſtitution is generally languid and impoveriſhed; the Appetite debaſed, and the Complection faded; they are liſtleſs and indolent; ſick, faint, and commonly hectic. *Sydenham* calls it, a Species of Hyſteric Affection; Bleeding premiſed, with other neceſſary Evacuations, the Cure is to be compleated, by Chalibeats, and Aromatic Bitters: the Menſtrual Flux muſt be promoted, the Solids braced, the Fluids attenuated or enriched, as the Symptoms ſhall indicate, and their Motion moderately accellerated; good Exerciſe a clear Air, and Food of eaſy Digeſtion, are in Fact the beſt Medicines.

Imperforated Hymen.

In ſome Subjects, the Hymen has been found imperforate, and expanded to the Meatus Urinarius; in which Caſe, at the Age of Puberty when

when the Menſes ſhould appear, a Tumor will be formed by the Confinement of the Blood evacuated from the uterine Veſſels, which will conſequently excite very painful and troubleſome Symptoms, the Cure of which is to be effected, by a very eaſy and ſimple Operation; nothing further being required, than to puncture the Membrane with the Point of a Lancet, and to touch the Lips of the Wound, with ſome gentle Eſcharotic, to prevent their Reunion.

Fluor-Albus.

The Fluor-Albus, is a Diſeaſe from which few Women, eſpecially thoſe of a very lax and delicate Habit, are entirely free: it is frequently the Conſequence of the Diſorders already mentioned, and is ſometimes, the Effect of Blows, Falls, Sprains, Fevers, and other Diſeaſes; the Diſcharge is furniſhed, by the Glands of the *Vagina*; tho' *Aſtruc*, and many other Writers Affirm, that it flows from the *Lacunæ* of the *Cervex uteri*: it varies in Colour, Smell, and Conſiſtence, according to the Conſtitution of the Patient, or the Cauſe and Continuance of the Diſcharge. In the Beginning, it is a ſlimy, colourleſs, or milky Running, ſometimes yielding a cadaverous Smell, ſometimes entirely inodorus: when of long Continuance, it becomes of a yellowiſh or green Colour, acquires an acrid and corroſive Quality, and a very fœtid and putrid Smell.

A Pain and Weakneſs in the Loins, with a general Debility and Loſs of Appetite, are the conſtant Attendants of this Diſeaſe when it flows to any Degree: and the Pain will generally,

rally, be more conſiderable, if the Diſcharge is thin and lymphatic. The Urine is commonly turbid, the Digeſtion bad, and the Sleep ſhort and unrefreſhing, and the Diſcharge if long neglected, may bring on a Dropſy, or End in a Conſumption.

It may be eaſily confounded with an Ulcer of the Womb or a Gonorrhæa; but the latter, is always attended with a violent Heat in the Urine, and a Diſcharge of a thicker and more purulent Matter, than that of a recent Fluor-albus; the Diſcharge from an Ulcer, is more fœtid and purulent than either of the foregoing; as the Matter from the Gonorrhæa is never fœtid, and the Fluor-albus only when of long ſtanding. The Criterion of Diſtinction between this and the Gonorrhæa, founded on the Diſappearance of the one, and Continuance of the other, during the menſtrual Evacuations, is found to be fallacious. The Matter from an Ulcer, is leſs in Quantity, and attended with Pain and feveriſh Symptoms; and according to *Aſtruc*, a virulent Gonorrhæa, is in all Reſpects, like a Fluor-albus, as that, when acrid, will inflame and ulcerate the external Parts. *Pitcairn* reſts the Diſtinction between this Diſcharge and the Gonorrhæa, in the Conſiſtence of the Matter, the latter being always evidently thin and ſerous, the other moſt commonly viſcid.

Mead obſerves, that the Fluor-albus ſometimes is diſcharged from the uterine Veſſels, and ſometimes from the Glands of the *Vagina*; in the firſt Caſe, it ſtops when the Menſes begin to flow, in the latter, it continues with them, and

Pregnant

pregnant Women are not exempted from it. *Pitcairn* has obſerved a Caſe, which laſted four Years, in which the Diſorder returned regularly every new Moon, and continued eight Days. We may add to theſe Obſervations, that ſome Women have periodical Returns of the Whites, inſtead of the Menſes.

A long Continuance of this Weakneſs, will render ſome Women in a Manner barren, by ſubjecting them to frequent Abortions, and relaxing the Parts ſo far, as to deſtroy their Power of Retention, and occaſion the Semen to be thrown off after every Coition.

Morgagni has the following Paſſage, "Beſides arterial Blood, the Menſes conſiſt of redundant Lymph or Serum, chiefly from the membranous Cells and Ventricles of the Glands of thoſe Parts of the Membrana Celluloſa, which are more immediately connected with the Kidneys, Uterus, and Ovaria; when this lymphatic Secretion becomes morbid it is called the Fluor albus; at firſt, the Parts of the Membrana Adipoſa of the Loins, Kidneys, and uterine Appendages are waſted by it, but at length, the Flux becomes acrimonious, and may melt and carry off all the Fat of the Body."

The cure of this Diſeaſe, though extremely difficult may however ſometimes be effected; we muſt begin by bleeding once or twice in ſmall Quantities; a gentle Emetic or two, and ſome mild Purges muſt alſo be adminiſterd at proper Intervals; and then Preparations of Bark, Steel, calcined Vitriol, Allum with a Proporti-

on of Rhubarb, or Pills made of the reſinous Gums, with a mild ſubacid Regimen and Food of light and eaſy Digeſtion, but not too humid: if theſe fail, a Cure may be obtained, by the Balſam Traumaticum and Balſamum Guaicinum in equal Proportions, gently acidulated with the Elixir Vitrioli dulcis, thirty or forty Drops of this Compoſition, taken twice a Day, in an Infuſion of the Tops of St. Johns Wort, beat up with the Yolk of a new laid Egg; or an Improvement of *Quincey's* Antivenereal Elixer, by the Addition of Gum Guaicum, may be taken in like Manner.

Hyſteric Paſſion.

There are few Diſeaſes in their own Nature more complicated or perplexing than the Hyſteric Paſſion; it is indeed, an Aſſemblage of various Symptoms, under one general Name: it aſſumes the Appearance of almoſt every acute Diſeaſe, and affects Women of all Ages, Stations, and Conſtitutions, but chiefly thoſe of the more lax and delicate Frame, ſuch as have been much afflicted with either of the Irregularities or Indiſpoſitions already recited; or ſuch whoſe vital powers, have been impaired by frequent Labours: in ſome it is accidental, in others, an habitual Diſeaſe; but always obſtinate and difficult of Cure.

The Hyſteric Paſſion, as it aſſumes the Symptoms, produces alſo the Effects of various Diſeaſes. The temporary Fit, is a Species of Spaſm, betwixt the Epiliptic and convulſive Kind, and in its Duration, is only to be treated as other nervous Affections of that Sort, with volatile Salts and fœtid Gums, applied by Way of

of Stimulus to the Noſtrils, or taken as Drops in cold Water. Some have maintained this to be merely an Uterine; others, merely a nervous Affection: it is evident however, that it is of a mixed Nature, partaking of both, as the more frequent Cauſe of this terrible Affliction, is the Irritability of the uterine Nerves, either affected by Tenſion or Relaxation, though it muſt be Conſeſſed, that the Paſſions of the Mind, have in this, as in all ſpaſmodic Affections, an Irreſiſtable and ſpontaneous Power.

As moſt Authors have been very copious on this Subject, I ſhall only enumerate, a few of the moſt material and troubleſome Symptoms, and point out what appears to me the moſt eligible Method of Relief, for an abſolute Cure is hardly to be expected.

The moſt painful and perplexing Symptom, which accompanies this Diſtemper, is an acute Pain on the ſide of the Head or Temples, called *Clavus-Hyſtericus*; it yields the Senſation of violent Friction and Preſſure; or as the Patients generally deſcribe it, as if a Gimblet was boreing the Part: this is very difficult to remove; but moſt readily yields to topical Applications, of which, the moſt powerful is a Plaiſter of Galbanum, with Caſtor, Opium, and Oil of Amber.

A Coldneſs on the Crown of the Head, or over the Fontanelle, with a Senſation of Water deſcending from thence down the Back-part of the Occiput, Neck, and ſometimes along the whole Courſe of the Spine, is an almoſt conſtant Attendant alſo on this Diſorder, and

and we generally conclude ſuch Perſons hyſterical, who complain of this Symptom, though no other viſible Characteriſtic of the Diſeaſe appear.

A preſſing Pain of the Forehead, Temples, or Eyes, a Dullneſs of the Mind, and Senſes; a Dimneſs of Sight; a Loathing of all Food, and an involuntary Effuſion of Tears, generally, precede the Fit; in which ſome women laugh, others cry, to exceſs; ſometimes, both theſe Emotions, are alternately exerted. The Patient, is Generally coſtive when the Fit comes on; but has a ſtrong ſtimulus to diſcharge her Urine, which is crude, limpid, and ſometimes clear as Water; the Uterus and Bladder being ſo intimately connected, that the Irritation of the one conſequently affects the other; the Extremities are alſo affected by Conſent of Parts, the Stimulus being communicated by Means of the Nerves of the Os Sacrum and Loins, to the whole nervous Syſtem.

The Fauces are contracted in the Fit, and the Patient ſeems in Danger of Suffocation; the Breath is uneaſy, difficult and ſhort; and a Languor ſeizes the whole Body; to theſe ſucceed a great Shivering and Pain in the Loins; and the Belly is hard and inflated; the Heart flutters, and the Pulſe is conſequently hard, unequal, and ſometimes intermitting, the Voice ceaſes, and there is ſo great a Stricture of the Belly, that no Wind can be diſcharged. Some are convulſed; others have their Face and Neck, red and inflamed; and ſome Women, have lain ſo long in a profound Sleep, without Senſe or Motion,

or even any ſenſible Pulſe, as to have been laid out as dead.

On the Remiſſion of the Fit, the Pulſe gradually recovers its Strength and Celerity, and the pale and contracted Face, begins to expand and regain its Colour; the wind Forces its Way upwards, there is a rumbling in the Belly, and the Patient waking, as it were from a profound Sleep, ſpontaneouſly recovers her Speech, Senſe, and Motion; yet complains of a Pain in the Head, and a Languor of the whole Body remains.

In attempting the Cure, our firſt Attention muſt be to explore the Cauſe: Plethoric Habits, will be relieved by bleeding, but it is ſeldom adviſeable in the Fit: Emetics on the Approach, and gentle Cathartics on the Remiſſion of the Fit, are uſeful; but no very powerful ones ſhould be uſed: the Evacuations by Urine and Perſpiration, ſhould be particularly promoted, and the digeſtive Faculties aſſiſted and reſtored.

The deobſtruent and Fœtid Gums, the Cephalic and nervous Simples, properly blended, will aſſiſt the Cure: *Mead*, recommends Valerian with factitious Cinnabar; *Sydenham*, adviſes the Bark; *Hoffman*, recommends Pills of the fœtid Gums, with Caſtor and Theraca Andromica; and a Cathartic of black Currants and Rhubarb; Opiates are at all Times highly neceſſary; but we muſt always carefully obſerve the various Effects of different remedies on different Conſtitutions; and regulate our Conduct thereby.

Furor

Furor Uterinus.

From a long continued, and exceſſive Influence of the hyſteric Paſſion in ſuch Conſtitutions, as are ſubject to a too great Propenſity of the Humours, to the uterine Veſſels; or a too copious Accumulation of the ſeminal Juices; a Species of Madneſs may be produced, diſtinguiſhed by the Term of *Furor uterinus*. This is however no common Diſorder, but is eaſily diſtinguiſhed, though not ſo readily cured. There is in this Caſe, a conſtant Irritation and Itching of the external Parts, and an inſatiable Deſire of carnal Embraces, which is conſtantly avowed by laſcivious Geſtures, and indelicate Expreſſions.

A refrigerating and relaxing Diet and Regimen, are highly neceſſary; plentiful Evacuations muſt be premiſed, and the Cure attempted by ſuch Medicines as will ſtifle and deſtroy the Cauſe. Camphior, Opium, and the fœtid Gums, with ſtrong Infuſions of Valerian and Caſtor, may perhaps ſucceed: a warm Bath, or a Semicupium, will aſſiſt the Cure.

Relaxation of the Ligamenta Uteri.

From either of the foregoing Cauſes, the Ligamenta uteri will be ſometimes ſo relaxed, (eſpecially in Women who have borne Children) as to produce a Bearing down, or Deſcent of the *Uterus*, into the *Vagina*, ſometimes as low as the *Labiæ*. The Cure conſiſts in replacing it, with the Finger, and adminiſtering corroborating Medicines, and incraſſating

Diet.

Diet. The Patient muſt reſt, and uſe evry little Exerciſe for ſome Time, and to complete the Cure, have Recourſe to the Cold-bath. This Complaint, with many aggravated Circumſtances, as conſequent on difficult Labours, we ſhall enlarge upon hereafter.

Inflammation of the external Parts.

From long and obſtinate Obſtructions, the *Uterus* and its Appendages, and the external Parts themſelves, will ſometimes be greatly tumified and inflamed, which will excite a Train of feveriſh, and very troubleſome Symptoms; theſe will however, generally yield to bleeding, and other Evacuations, aſſiſted by cooling and diaphoretic Medicines, ſuch as the common ſaline Mixture or Draughts, with Nitre; and the Pulvis cont. comp. and if the Inflammation be very conſiderable on the external Parts, a Cataplaſm, or cooling Ointment, with Fomentations, may be neceſſary.

But ſometimes, when theſe Inflammations ariſe in very bad Habits of Body, they may be productive of very fatal Conſequences, in producing Gangrenes and Mortifications, or may be changed into a Species of Diſeaſe, which, if not abſolutely incurable, will be very difficult, tedious, and perplexing.

Scirrhous Tumours.

All glandular Parts, are from the Stagnation of their Juices, which are eaſily, and often ſuddenly inſpiſſated, ſubject to Indurations, and

Tumours

Tumours of the ſcirrhous Kind; and the *Uterus*, being loaded with glandular Corpuſcula, whoſe ſecretions are moſtly of the more viſcid Nature, is conſequently greatly expoſed to Maladies of this Sort. It is not however, an eaſy Matter, to determine when the *Uterus*, or any of its Appendages, are thus affected, what is the preciſe State, or Nature of the Diſeaſe. The *Os Tincæ* will indeed, ſometimes, by its Weight and Hardneſs, give us Reaſon to ſuſpect, but can ſeldom, if ever, furniſh us with an infallible or poſitive Criterion. It is therefore highly neceſſary in theſe Caſes, to examine by the *Rectum*, the Bulk and Weight, and even Hardneſs of the Tumour, being more eaſily to be diſcovered that Way.

When the *Uterus* is thus affected, there will be a ſenſible Hardneſs and Reſiſtance of the Part, with a Senſe of Weight, as if the *Uterus* was falling down to the Edge of the *Pudenda*. Theſe Symptoms are chiefly obſervable, when the Patient ſtands upwright; when ſhe ſits, the Weight preſſes on the *Rectum*, and yields a very uneaſy Senſation. There are few Remedies to be recommended in theſe Caſes; the mercurial Alteratives are by ſome, ſtrongly recommended, and by others as much condemned. The *Æthiops Vegetabile* of *Ruſſel*, will ſometimes ſucceed, and in the Beginning, the Extract of Hemlock may perhaps take effect; but when theſe Tumours degenerate, as in Time they will do, into cancerous Ulcers, the Hopes of Cure are indeed very ſmall, and we can ſeldom do more than palliate the Symptoms; Opiates may be freely uſed, and a Decoction of Bark with Myrrh,

Myrrh, when the Diſcharge is very copious, will do more than perhaps can be expected, from any other Medicine.

Sterility.

From a general Relaxation and Debility of the Parts, either from a hectic, feveriſh, and ill Habit of Body, or from any of the foregoing Cauſes, the *Uterus* may either not properly receive, or be able to retain the Semen after Coition; this, as an evident Cauſe of Sterility, is perhaps the only one that can be fairly accounted for, or will admit of a Cure, which may generally be effected by mildly ſtiptic Injections, after firſt waſhing the Parts with Barley Water, or an Infuſion of St. John's Wort, thrown up warm with a Syringe, and the Patient, when on the Recovery, ſhould go into the Cold-bath, to brace and ſtrengthen the Conſtitution; the original Cauſe of the Debility, muſt however, be properly attended to, and if poſſible removed.

SECT. II.

Diſeaſes of Pregnancy.

PREGNANT Women are ſubject to various Complaints. In the earlier Months, the Nauſea or Sickneſs is moſt troubleſome; this however, can only be remedied by regulating the Form of Diet, the Degree of Exerciſe, and ſo forth. Sometimes it will be accompanied with a ſevere Head-ach, from a Fulneſs of Blood, in which Caſe, bleeding will be requiſite.

According to *Boerhaave*, ſome of the Diſeaſes of pregnant Women, proceed from an Obſtruction of the menſtrual Diſcharge, by the Conſtriction of the *Os uteri*, and the Incapacity of the *Fœtus* to conſume the redundant Blood for its own Growth and Increaſe; others, from the Bulk and Motion of the *Fœtus*, Secundines and Waters, acting on thoſe ſenſible Parts. To the former of thoſe Cauſes, he aſcribes the Nauſea, Vomitings, Loſs or total Deprivation of Appetite, Deliquiums, Vertigoes, intenſe Pains of the Stomach, Pubes, Groin, Kidneys and Breaſts, a Torpor, or Senſe of Weight, a Difficulty of Breathing, and Abortion. As all theſe Diſeaſes, ſays *Boerhaave*, ariſe

ariſe from the ſame Cauſe, ſo they all yield to the ſame Remedy; Veneſection.

The increaſing Bulk and Motion of the *Fœtus*, will excite alſo, all the foregoing Symptoms, as likewiſe a Retention of Urine, Coſtiveneſs, the Piles and Varices, Inflammations and Tumefactions of the Labiæ Pudendi, and lower Extremities, and a falling down of the *Uterus*. Theſe Symptoms, he ſays alſo, may be removed by Veneſection, by Change of Poſture, or proper Swathes.

But though *Boerhaave*, and moſt other Authors recommend bleeding, in all Diſorders incident to pregnant Women, Dr. *Lobb*, who a few Years ſince, read Lectures in this Metropolis, on the Practice of Phyſic, argues againſt that Practice with a great Shew of Reaſon; alledging, that though the Quantity of Blood evacuated monthly, from a Woman in Health, be different in different Women, yet at a mean Computation, it does not exceed ſix or ſeven Ounces; that therefore the Evacuation, during the Space of ten lunar Months, does not, at a moderate Computation, exceed four Pounds and ſix Ounces; that almoſt every Particle of Matter, of which the Child at the Time of its Birth, and of which the Placenta, and the Membranes involving the Child conſiſt, did ſubſiſt in the arterial Blood of the Mother, before they were ſecreted from it; that the Weight of the Child, Placenta, Membranes, and Funis, much exceeds, at the Time of its Birth, the Weight of the Quantity of Blood, evacuated by the Mother in ten lunar Months. Hence (he concludes)

it

it is, that Women grow thinner in their Faces and Bodies in the Time of their Pregnancy;—that it is evident from theſe Conſiderations, that a Woman never wants Blood in any Time of her Life ſo much, as during her Pregnancy, and conſequently, that it is very improper to take away Blood from a Woman with Child—that as the Quantity of Blood in a Woman with Child, is never more than it ſhould be, the diminiſhing its Quantity, muſt alſo diminiſh the vital Strength of the Mother, in Proportion to the Quantity taken away, and enfeeble the Action of her Heart and Arteries, and will alſo deprive the Child of a proportionate Degree of its Nouriſhment and increaſe, and render it weak and languid. He adds further, that there is not a more certain Way to procure Abortion, and bring Diſeaſes on a Woman with Child, than a frequent and copious Veneſection.—that it was the Obſervation of *Hippocrates*, that a Woman with Child, if ſhe is blooded, miſcarries, and the ſooner, the larger the *Fœtus*—and that it deſerves Conſideration, that young Women, who have their full Quantity of Blood, their Fleſh firm, their Bodies ſtrong and agile, and inured to Exerciſe and Labour, ſcarce ever ſuffer Abortion, except from ſome violent Cauſe; as a Fall, Fright or ſo forth; and that the Women moſt ſubject to miſcarry, are thoſe of a tender Conſtitution, lax Muſcles, a feeble Pulſe, and who have too little Blood.

Though it is very certain, that many Inconveniencies may ariſe from too frequent and copious Bleedings during Pregnancy, it is as certain, that Veneſection, unleſs ill-timed, or too freely

freely uſed, will not produce an Abortion, but on the contrary, may on ſome Occaſions actually prevent it; yet I am ſo far of Dr. *Lobb*'s Opinion, as to oppoſe that Operation, unleſs where preſſing Circumſtances urge the Neceſſity of it; and cannot help condemning the too frequent Practice of Bleeding, for no apparent Cauſe, two or three Times during Pregnancy.

Nauſea.

From the Preſſure of the gravid Uterus on the principal Blood-veſſels, and Viſcera of the Abdomen, a Sickneſs, Pain, and languid Circulation will be produced, which will conſequently ſubject Women of lax and delicate Habits, to frequent Deliquiums, Tremors, Pains in the Head, and other nervous Symptoms. Theſe however, are not very alarming or dangerous Maladies, and may generally be relieved by carminative, aromatic, and nervous Cordials, and a few Bitters may be occaſionally adminiſtered, to ſtrengthen and reſtore the Appetite, and help the Digeſtion.

Heartburn.

After the Quickening (which happens at different Periods in different Women, and ſometimes alſo, in the different Pregnancies of the ſame Woman) thoſe Symptoms will be mitigated, and the Nauſea ſometimes wholly removed: and the Patient, if coſtive in particular, will be afflicted with the Heartburn, a very painful and troubleſome Complaint of the Stomach, occaſioned by vitiated Humours, vellicating

cating and exciting great Pain, and ſpaſmodic Conſtrictions, in the Stomach, or at its Orifices; a Congeſtion of Blood, or predominant Acid, may alſo produce this troubleſome Complaint; in which Caſe, the teſtaceous Powders, or the Magneſia, and ſometimes a little Bark, with Valerian in Powder, will be proper; but the common Remedy of Chalk and Watet, as it is too aſtringent, is very pernicious; a little lenitive Electary, Manna, or a few Prunes ſtewed with Senna, or a ſmall Draught of ſome apperitive Apozem, ſhould be occaſionally adminiſtered, to keep the Body cool, and gently open.

Diarrhæa.

On the other Hand, a Diarrhæa will be ſometimes very troubleſome during Pregnancy, and if the Matter diſcharged from the Bowels, be very thin and acrid, it will excoriate the Parts, and occaſion a troubleſome Teneſmus; or by exciting an Inflammation, produce the Piles; toaſted Rhubarb, with the teſtaceous Powders, and gentle Aſtringents, not to ſtop the Diſcharge too ſuddenly, or before the viſcid and acrid Humours are properly evacuated, muſt be firſt given; but if the Bowels are affected by conſtant or ſevere Gripings, a Doſe of Philonum, or ſome other Anodyne, may be advantageouſly adminiſtered; the Hartſhorn Drinks, may be taken freely, and the more powerful Aſtringents, if needful, be uſed to compleat the Cure. The Teneſmus will yield to the Power of Ipecacuanha, in ſmall Doſes, when nothing elſe will take Effect.

Piles,

Piles.

Liniments, with the Balſam or Lac Sulphuris, in Ointment of Elder Flowers, or Pomatum, or a common Poultice of Bread and Milk, with a little Flower of Sulphur, may be applied to the Parts, when the Piles are troubleſome, or if that Complaint prevails in coſtive habits, as from the Heat of their Bodies it very often does, a little Lac Sulphuris, either in Milk, Treacle, or lenitive Electary, will relieve the Symptoms, and remove the Cauſe.

Swellings and Pains of the Breaſts.

The Breaſts, eſpecially in a firſt Pregnancy, moſt commonly after Quickening, become turgid, ſwelled, and painful; there needs however no Application, unleſs bathing them with a little warm Oil may be thought neceſſary, as the Effects depend upon natural Cauſes, which are not to be removed, and can only be mitigated by keeping them warm, and allowing them Room to grow.

Menſtrual Diſcharges.

The Menſtrual Diſcharges will in ſome Women keep their regular Periods, during a great Part of the Term of Geſtation; this however, is very prejudicial to the Woman, and if the Evacuation is furniſhed from the uterine Veſſels, will impair the Strength of the *Fœtus* alſo, and perhaps produce an Abortion. Theſe Evacuations however, are ſeldom ſo copious or florid, and never but in Caſes of actual Floodings,

ings, ſo viſcid and tenacious as in their natural Courſe, when the Woman is not pregnant. In this Caſe, we may with ſafety bleed once or twice, by Way of Revulſion, after which, Styptics are to be employed; as the Pulv. e. Succin. comp. Bark, Tincture of Roſes, Extract, or Decoction of the Lignum Campechenſis. The Patient muſt be kept ſtill; ſhe ſhould breathe a clear and wholeſome Air; live upon Aliments of eaſy Digeſtion, and gentle ſubacid Drinks; avoid all powerful Emotions, and (eſpecially at the Periods) uſe but little Exerciſe.

Œdemetous Swellings.

Women of lax and delicate Habits of Body, are often troubled with œdemetous Swellings of the Labiæ and lower Extremities, which are generally allowed to ariſe from the languid State of the Circulation; the refluent Blood being from the Compreſſion of the Vena Cava, by the diſtended Uterus, retarded in its Courſe, and the minuter Veſſels, of Conſequence, more diſtended with Lymph or Serum.

Towards the End of Geſtation, theſe Complaints, are moſt troubleſome; ſometimes the whole Body will be conſiderably bloated, and ſometimes one Side only will be affected, or at leaſt more tumefied than the other: theſe are rather to be deemed Inconveniencies than real Diſeaſes, as they are ſeldom (unleſs in very bad habits) productive of ill Conſequences: bleeding is in general, highly improper, though recommended by ſome Authors; gentle Diuretics, and mild Purgatives, at proper Intervals, with an occaſional

occaſional Anodyne, if the Reſt ſhould be diſturbed, or too ſhort and unrefreſhing, will afford all the Relief that can be expected from the Power of Medicine; a Bliſter to the Legs will ſometimes drain off the Water, and if the Labiæ are ſo tumefied as to retard the Labour, they may be punctured with a Lancet. In a ſhort Time after Delivery, theſe Symptoms will diſappear, but the Feet and Ancles will frequently ſwell again at the End of the Month, and two or three ſmart Purges, at proper Intervals, may be neceſſary to reduce them.

Suppreſſion and Incontinence of Urine.

The urinary Bladder will be differently affected by the Diſtention of the Uterus, at different Periods of Geſtation. In the earlier Months, before the Fundus uteri can have riſen above the Brim of the *Pelvis*, a Difficulty, or total Suppreſſion of Urine, will be occaſioned by its Preſſure on the Neck of the Bladder, which will ſometimes even require the Aſſiſtance of the Catheter. This Inconvenience will ſometimes continue ſeveral Days, and be very troubleſome; and as the Obſtruction depends only on the Preſſure of the Uterus, Medicine will here avail but little; the milder Diuretics may however be tried, eſpecially if the Urine be only obſtructed, not wholly ſuppreſſed; but the readieſt and moſt rational Method of Relief, is to draw the Water off once in twelve or twenty four Hours, till by the Riſing of the Uterus above that Part, the Preſſure on the Neck of the Bladder, and of Conſequence the Inconvenience, is removed.

A Complaint, the Reverſe of this, will towards the latter End of Geſtation, (and ariſing alſo from a parallel Cauſe) be equally troubleſome, for by the Weight of the gravid Uterus, preſſing on the Fundus of the Bladder, it will not have Power to diſtend ſufficiently to contain the uſual Quantity of Water, which will therefore produce an Incontinence, or frequent Neceſſity of evacuating the Urine: this Complaint, like the former, can only be palliated by the Application of a proper Bandage, to ſupport the Weight of the Abdomen.

Every of theſe Inconveniencies, may ariſe alſo after Delivery, from the Preſſure of the contracting Uterus, if any conſiderable Coagula ſhould be retained in it, or if by the Intruſion of Air, from the Neglect of applying a warm Cloth to the Os externum on the Birth of the Child, its Contraction ſhould be retarded, the Suppreſſion is moſt commonly the Conſequence of theſe Cauſes, and the Catheter its only Cure. The Incontinence may, and moſt frequently does ariſe from another Cauſe, to be mentioned hereafter.

To prevent the Retention of Urine from either of theſe Cauſes, the Woman ſhould be directed to make Water as ſoon as ſhe can with Safety be moved after Delivery; and if any Difficulty ariſe on the firſt Effort, a Bladder of warm Water ſhould be applied to the Pubes and upper Edge of the Labiæ, which will promote the Evacuation.

Though theſe Complaints may in this ſimple Manner be accounted for, as ariſing from mere Preſſure

Preſſure only, it is not impoſſible however, that they may be produced by convulſive Spaſms, excited by ſome Irritation on the Nerves of thoſe extremely ſuſceptible Parts, in which Caſe, Anodynes will be very neceſſary, and the diuretic ſhould be blended with antiſpaſmodic and nervous Medicines.

Cough, and Difficulty of Reſpiration.

During the Time of Geſtation, a Cough will be ſometimes very troubleſome, and by ſhaking the whole Frame, will threaten a Miſcarriage or premature Labour. This Complaint, eſpecially towards the End of the Time, will at every returning Spaſm, ſo preſs on the Bladder, as to force away its Contents, for which Reaſon, Women ſo afflicted, ſhould always wear a ſoft warm Cloth to the Parts, and frequently renew it, leſt their Cold ſhould be increaſed by continual Damp, or an Inflammation be excited by the Excoriation, in this Caſe unavoidable. The Cough ſhould be mitigated by balſamic and anodyne Emulſions, and Linctuſes, or by pectoral Drinks, and if any Degree of Inflammation ſhould appear, a little Blood might be drawn with Safety and Succeſs; or if the Reſpiration ſhould be oppreſſed, a ſmall Doſe of Lac Amoniacum might be occaſionally added to the former Medicines.

But a Difficulty of Reſpiration, will frequently ariſe alſo from the Preſſure of the diſtended Uterus on the Diaphragm, towards the latter End of Geſtation, accompanied with acute and fatiguing Pains in the Loins, Back, Belly, Thighs,

Thighs, Stomach, &c. many of which arise from its Pressure on the other Viscera, others, from its pushing them as it were, out of their Situation, the whole System of intercostal and lumbar Nerves, with those of the Viscera in general, being at this Time much oppressed and incommoded; hence besides the Pains and Difficulty of Breathing just recited, Reachings, Shiverings, Faintings, and other similar Symptoms will frequently arise. In palliating these Complaints, we must be guided by the general Habit and Constitution of the Patient; gentle Exercise; resting frequently on a Bed or Couch; occasional Bandages to support the Weight of the Abdomen; with gentle Evacuations, in whatever Form the Case and Constitution may suggest.

Gonorrhæa.

Though the Symptoms of the Gonorrhæa or Lues Veneræ, will very little vary in a pregnant Woman, from those in Women not so circumstanced, the Method of Cure must be considerably varied, as the Use of Mercurials, if too freely administered (notwithstanding the Symptoms will sometimes be greatly aggravated) may endanger a Miscarriage or premature Labour.

The Cure must therefore be attempted by the milder Diuretics and Alteratives; or by small Doses of Mercurials, where they are indispensably necessary, at proper Intervals, and sufficiently diluted, and washed off with the Decoction of the Woods, or Sarsaperrilla.

The

The Parts muſt be kept clean and dry, and the Vagina frequently waſhed by Injections of warm Barley Water, with Mel. Roſar. and afterwards with the milder Detergents. The beſt Form of Medicine, is the Pulv. e. tragacanth. c. with Cremor Tartar and Nitre, the Belloſte's Pill, or the Mercur. Alkalizat. purged off with Salts and Manna.

There have been Inſtances of Women in their Pregnancy, going through a gentle Salivation, but the Attempt is hazardous, and where the Symptoms run ſo high as to require that Proceſs, it would be more prudent to palliate them only, and defer the Cure, (unleſs in the early Months) till after Delivery.

Symptoms requiring Medicine in the Time of Labour.

In the Time of Labour many Circumſtances may ariſe that require the Aſſiſtance of Medicine: the Inteſtines ſhould at all Times be cleared of their Contents; if the Veſſels are turgid and a Fever ariſes, a little Blood may be drawn off; if the Spirits are low and the Woman weak, a Cordial ſhould be adminiſtered; a few Drops of Spirit of Lavender with Salvolatile; or a few Drops of Hartſhorn; or a little Confectio Cardiaca; in ſome ſimple carminative and cordial Waters; or when the Pains are very fatiguing, that is, violent, and at the ſame Time unprofitable, an Anodyne muſt be given, which may be either a Grain of Opium itſelf, or a Doſe of the Pil. mathei, or of the Soap Pill, or of the Storax Pill, equal to that Quantity;

tity, or about thirty or forty Drops of Tinct. Thebaica, in a little warm Wine and Water.

Among Women Practitioners, it is uſual, in all lingering Caſes, to adminiſter uterine (or what they call forcing) Medicines to forward and aſſiſt the Delivery: ſuch as Oil of Amber, compound Powder of Myrrh, Borax, and the like; which, if given Time enough to have any, it muſt be a bad Effect. The Woman however, muſt be properly ſupported by Caudle and other Drinks, but Wine, or ſpiritous Liquors and Spices in general, muſt be ſparingly uſed, as they, as well as the Medicines above condemned, are too apt to accellerate the Motion of the Blood, and excite a temporary Fever; and may be productive of Fevers and Floodings after Delivery. Sometimes however, at the Cloſe of a Labour, when the bearing Pains grow weak, or cut off too ſhort, a Glaſs of Wine or Brandy may be of great Service to the Patient, and aſſiſt the Operator at the ſame Time, by ſtrengthening the Efforts of Nature.

SECT.

SECT. III.

Diſeaſes conſequent on Delivery.

Floodings.

FLOODINGS after Delivery, muſt if violent, be checked, by topical Applications, as we cannot expect from the Power of Medicine, ſo ſpontaneous an Effect as the Nature of the Caſe requires. Thoſe Applications we have already mentioned, and have only to add in this Place, ſome Hints in Reſpect to the Injury the Conſtitution may ſuffer, from Accidents of that Nature.

If the Diſcharge be very copious, ſudden, or of long Continuance, the Effuſion may deſtroy the Texture of the Blood, and will ſubject the Patient to Languor, Convulſions, and Syncope, by depriving the Heart of that Portion of the vital Fluid, which ſhould ſupport its alternate Contraction and dilatation, on the conſtant equality of which, Health, and even Life itſelf depends.

An irregular hectic Fever will frequently ariſe from theſe Cauſes, which if neglected, may induce a Conſumption, or at leaſt, terminate

nate in very alarming and enervating Weakneſſes, for which Reaſon the Blood ſhould be enriched by a Decoction of Bark with Myrrh, the Appetite ſtrengthened by aromatic Bitters, and the Fibres duly braced by good and regular diet, Air, and Exerciſe, or the Cold-bath if neceſſary.

Suppreſſions of the Lochiæ.

On the other Hand, as alarming Symptoms, and as fatal Conſequences may ariſe, from a Suppreſſion of the common and neceſſary Diſcharges, which ſhould therefore, by all prudent and neceſſary Means be properly promoted.

A Suppreſſion of the Lochiæ, will produce an intenſe and raging Fever, with acute Pains in the Head, Loins, Stomach, Bowels, and Extremities; a great Thirſt, Anxiety, and Oppreſſion of Spirits, and will ſometimes alſo, terminate in Madneſs. The febrile Symptoms, the ſpaſmodic and hyſteric Affections, indicate as they riſe, their Method of Cure. In the former, bleeding will be neceſſary, with the ſaline and nitrous febrifuge Medicines; in the latter, a Bliſter, with the nervous and antiſpaſmodic Remedies. Under all Circumſtances, the Perſpiration is to be plentifully promoted, and the ſuppreſſed Diſcharges properly re-excited; but in this Intention we muſt be cautious not to employ too ſtimulating Medicines, leſt we ſhould rather aggravate than mitigate the Symptoms. The Elixir, or Pulvis e. myrrh. c. may be uſed in ſmall Doſes on this Occaſion. Where the Pulſe is very rapid, diluting Drinks, and where languid,

languid, a grateful Cordial muſt be occaſionally adminiſtered: Fomentations to the Abdomen, and Gliſters alſo will be Extremely uſeful, and in obſtinate Watchings, or Want of Reſt, an Anodyne may be neceſſary, or a Galbanum Plaiſter, with a Proportion of Opium, applied to the Navel, will not only relieve the Pain and Tenſion of the Abdomen, but alſo promote the ſuppreſſed Diſcharges: generally in theſe caſes, the Uterus is inflamed, and diſtended, either with Coagula, or Air accumulated by the Neglect of keeping proper Cloths to the external Parts, and rarified by the Heat of the Body; a conſiderable Tumor, will be felt by laying the Hand on the Abdomen, towards the Solution of which, the Plaiſter above mentioned will greatly contribute.

Lochial Fever.

The Pulſe is generally full and ſtrong, for two or three Hours after Delivery, if it continues ſo for ſix Hours, there is Danger of a Lochial-fever; to prevent which, too much Care cannot be taken to keep the Woman properly cover'd for the firſt four or five Days; as the Checking the Perſpiration may be productive of miſchievous Conſequences. In warm Weather Women are apt to keep their Arms out of Bed, and to toſs and tumble about, which ſhould be avoided.

The Lochial-fever, is a truly dangerous and perplexing Mallady; it proceeds generally from violent Affections of the Mind, as Grief, Deſpondency, &c. from the drinking of ſtrong

Liquors, or Caudle too highly ſpiced; from obſtructed Perſpiration, and Evacuations. The Symptoms are moſt commonly, a ſlow creeping Pulſe, which afterwards becomes very quick; ſometimes the Pulſe is quick at firſt, and ſlow afterwards; in ſome they are quick, full, and ſtrong; in others, quick, with alternate Heats and Shiverings, Pains in the Belly, Breaſts, and Sides; a Cough, a dry Skin, and Hardneſs of the Abdomen.

If the Fever continues or encreaſes, the Abdomen ſwells and becomes tenſe, and ſometimes ſo extremely ſore and painful, that the Woman can hardly bear the Bed-cloaths to touch it, or even a Warm cloth to be applied: if theſe Symptoms encreaſe, the inflamed *Uterus* becomes putrid and diſcharges a fœtid ſanies, and by the fourth Day the Fever becomes quite of the putrid Kind: now, if not before ſome violent Pains come on, in the Arms, and Thighs, ſucceeded by a Diſcolouration of the Skin, occaſioned by the blood corroding and ſtagnating in the Veſſels: then follows a Delirium, Symptomatic Stools, or ſweats that become colliquative: the Viſcera in general are affected, and about the ſeventh Day, the Patient dies.

Lochial-fevers, ariſing from Affections of the Mind or irregular Living, uſually prove fatal; when from taking Cold, and checking the Perſpiration, if the Patient be of a good Conſtitution, and is careful of herſelf at the Approach of the Diſorder, there are Hopes that ſhe may do well; eſpecially, if the Lochiæ are not wholly ſuppreſs'd, and ſhe has but ſlight Pains in the Sides

Sides and Abdomen, but if the Pains are violent and continue longer than twenty four, or thirty Hours, there is conſiderable Danger.

If the Fever goes on till the third or fourth Day, and then violent Pains come on in the Arms, Thighs, &c. (reſembling thoſe of the Rhumatiſm) attended with colliquative Stools, Delirium, &c. the Complaint generally proves mortal.

The Lochial-fever proceeding from obſtructed Perſpiration, is beſt reliev'd by Spermaceti Draughts and ſmall Doſes of Laudanum, with a few Grains of Contrayerva. Emollient Glyſters to foment the Bowels are very uſeful, ſometimes a gentle Laxative may be added to them; or a few Grains of toaſted Rhubarb, with Nutmeg may do good; Fomentations on the Abdomen are likewiſe of great Service, the Patient muſt be kept warm and well covered and have frequent Draughts of warm Broths and Grewels; as the moſt likely Method to ſucceed in the Cure of this Fever, is to promote a gentle eaſy Sweat.

Tho' this Diſorder is of the Inflamatory Kind, it ſeldom will bear to be treated as ſuch, for which Reaſon, unleſs the Pains are very great, we ſhould not Bleed, at leaſt for the firſt eighteen or twenty Hours. Women after their firſt Labour generally bear bleeding better than thoſe who have had many Children: the Pulſe on a nice Obſervation, will ſeldom be found tenſe, tho' quick and full, but is moſt commonly weak and undulating; nervous and hyſterical Women cannot bear the Loſs of much Blood, where

ſore, when it is neceſſary to bleed ſuch Patients, the Quantity at firſt taken away, ſhould be ſmall. In ſhort, this will hold good in all Conſtitutions in general, where this Diſorder occurs; as it is not certain that diſeaſes of the Viſcera are relieved by this Evacuation: and if Veneſection is uſed after the third Day, unleſs the Pains are violent, the Pulſe ſtrong, and the inflammatory Symptoms run high, it is generaly prejudicial.

The *French* often bleed four Hours after Delivery, but as it is a very diſagreeable Operation to many Patients, it is a Practice by no Means to be followed; for as it is generally ſuppoſed that Blood enough is loſt after Delivery, if the Patient were to die, from any Cauſe whatever, the Cataſtrophe would be aſcribed to the Bleeding: yet this Evacuation, is ſometimes highly neceſſary, after the firſt Day of this Fever, and has frequently been of the moſt ſingular Service: in general, the Pains in the Side or Abdomen are the moſt material Indications for the Loſs of Blood, which if not too copious can ſeldom do Harm while they remain.

In this complaint, Nitre is improper, unleſs in ſmall doſes; Spt. Myndereri, and ſaline Mixtures, unleſs thoroughly neutraliſed, are apt to excite too copious Perſpiration, and ſometimes Stools; too Warm and ſtimulating Medicines are alſo improper.

When the Putridity is coming on, the Patient appears better, this however is a deceitful Calm, and the utmoſt Skill is requiſite to prevent the Return of the threatening Storm: this

Fever

Fever is moſt common, and alſo more fatal in the hotter Months.

If the Patient is reduced by Stools, the Julep: Cretaceum with aq: cin: is the beſt Remedy, as the more powerful Aſtringents are not ſo ſafe. But the leaſt Aſſiſtance from Medicine is beſt, good Nurſing being chiefly required to keep the Patient Warm, and promote a gentle Sweat.

Milk Fever.

About the third or fourth Day, a febrile Commotion is excited in the Blood, by an Abundance of Chyle, accumulated and ſecreted in the Breaſts, for the Support of the Infant. If the Symptoms run high, and occaſion a Suppreſſion of the Lochiæ, the Conſequences may be fatal, if not properly regarded, as the redundant Fluids may be obſtructed in one or other of the principal Viſcera, and thereby lay the Foundation of various troubleſome and dangerous Diſeaſes.

The Milk-fever, when troubleſome, ariſes from nearly the ſame Cauſe as the Lochial, and requires much the ſame Treatment; the Flowing of the Milk ſhould be promoted till the fourth or fifth Day when the Danger of the Fever is over, it may be repelled with Safety.

A Pain in the Head, Back, and Stomach, with Nauſea and Rigors precede, and a Tenſion and Tumefaction of the Breaſts, extending to the Axillæ, accompany this Fever; which ſeldom however, continues longer than two or three Days, and goes off in a Sweat, proportionable

tionable to the Symptoms that preceded it. Gentle Cordials, abſorbent and antiacid Medicines, with the milder Diaphoretics, and Uterines, if indicated, may be adminiſtered; the Diet muſt be light and ſlender, the Excretion of the Urine ſhould be moderately promoted, and the Contents of the Rectum ſoftened and diſcharged.

But the readieſt Cure of this, (in ſome Degree, neceſſary) Fever, is in the Diſcharge of the Milk from the Breaſts, for which Reaſon, thoſe Women, who propoſe to ſuckle their Children, ſhould be directed to put the Infant to the Breaſt, in twelve, or at fartheſt twenty four Hours, after Delivery, as this will frequently prevent the Supervening of many dangerous and perplexing Symptoms; thoſe who do not, ſhould in due Time, have Recourſe to proper Repellents; ſuch as Embrocations of camphorated Spirits of Wine, with Tinct. of Myrr. or Oil, as the Caſe may indicate; and when the Milk begins to diſperſe, Diacilon Plaiſters may be applied; and a Stool ſhould be procured, perhaps ſomewhat ſooner than might otherwiſe be neceſſary.

Eruptive Fever.

From a previous Ferment in the Blood, or from Miſmanagement in the foregoing Circumſtances, an Eruptive-fever may enſue, which, from the Reſemblance of the Puſtules both in Bulk and Colour, to the Millet Seed, is termed a Milliary-fever; and is either ſimple, when they are filled with a tranſparent, limpid Serum, inclining to yellow, or of a Pearl Colour, or compound,

compound, when thoſe Puſtules are complicated with a Raſh or red Pimples.

The Eruptions are generally ſeen on the Neck, Breaſts, and between the Fingers, ſometimes over the whole Body. The Puſtules do not commonly appear, till the tenth or eleventh Day from the Beginning, and never decline till the eighteenth, and ſometimes, when the Cauſe is very predominant, continue till the twenty-firſt, or twenty ſecond Day.

This Fever is frequently attended with Cholic, nephritic, rheumatic, or pleuritic Pains, or ſometimes Throes, reſembling thoſe of Labour, with an Oppreſſion of the Breaſt, an alternate Sinking and Hurry of the Spirits, Reſtleſsneſs, Want of Sleep, and a low, quick Pulſe; a Want of Breath and Oppreſſion of the Breaſt are inſeparable and eſſential Symptoms of this Fever, and if attended with Loſs of Speech, Trembling of the Tongue, or a nervous Dyſpnæa, threaten Danger: a Diarhæa alſo, is a very alarming Symptom, as it not only prevents the Eruption, but gives a Check likewiſe to the uterine Diſcharges.

Bleeding is improper, but Bliſters are neceſſary, and the alkaline Abſorbents, with mild Cordials and Diaphoretics, muſt be adminiſtered; when the Eruption is compleat, a Glyſter ſhould be given. Hamilton recommends, from his own Experience, the Antimonium, Diaphoreticum, in the Doſe of a Scruple every ſix Hours.

Prolapſus

Prolapſus Uteri.

The Procedentia, or Prolapſus Uteri, will ſeldom admit of any Cure, but in the Reduction and Retention of the Part. The temporary Reduction, is a Matter of no great Difficulty; but it will not, without the Uſe of the Peſſary, be retained in the *Pelvis*. Of theſe Machines, there are ſundry Sorts, but the more common are the ſtalk and ring Peſſary, by either of which, the Uterus may be ſuſpended, and by ſtrengthening the general Conſtitution, by incraſſating and corroborating Food, and Medicines, and by conſtringing the Parts by proper Injections, the Cure may in Time be effected.

Sometimes the inner Membrane of the Vagina only, forms the Tumor, and the Os Tincæ deſcends only to the outer Orifice, but ſometimes the whole body of the Vagina is protruded, while the Uterus falls down within the Tumor, which is very large, and appears without the Labiæ, with the Os uteri in its Centre: In this Caſe the Tumor will be often excoriated, and even ulcerated by the Urine which muſt flow over it, by the Friction of the Thighs, or the Effects of a Fluor albus; which Ulcers and Excoriations muſt be healed, before the Reduction is attempted.

When a Peſſary has been worn, and aſtringent Injections uſed for ſome Time, the Patient ſhould have Recourſe to the Cold-bath to compleat the Cure.

Sup-

Suppurations of the Breaſts.

When the Milk is too copiouſly conveyed to the Breaſts, an Inflammation and Stagnation is ſometimes produced, which will very often ſuppurate, or degenerate to a hard and indolent Tumor: a ſlight Fever, Horror, alternate Heats and Cold, and an external Inflammation, are the Symptoms of this Stagnation. Repellents may be firſt tried, as the volatile Liniment, Palm Oil, and other emollient Ointments, but a Poultice of Bread and Milk, with a little Lard or oil, will be the more eligible Application; and there are few Tumefactions of the Breaſts, that may not be ſuppurated, diſcharged, and healed by that alone: it will even diſſolve and diſperſe ſome very hard Tumours, where the Degree of Inflammation has not began to form and depoſit the Matter; but if a Hardneſs remains for a long Time, a Liniment compoſed of Ung. Sambuc two Parts, with one Part of Ung. Cerul fort. and a little Camphire, may be uſed with Succeſs.

Sore Nipples.

Fiſſures and Inflammations of the Nipples, will be frequently very troubleſome, eſpecially to Women of delicate Habits. A Liniment of Mutton Suet and ſweet Oil, with a little ſoft Sugar; or the Spermaceti Ointment, with a little Myrrh and the Yolk of an Egg; or the Nipple may be moiſtened with a little Brandy or Tincture of Myrrh; but the moſt effectual Remedy for this Complaint is a Solution of of Saccharum Saturni, in a little Roſe-water.

SECT. IV.

Diſeaſes conſequent on laborious Labours.

Tumefactions, &c.

FROM the Efforts exerted, the Inconveniences ſuffered, or the Means of Relief applied, in a laborious Parturition, many conſequent Diſeaſes may poſſibly follow; the moſt ſimple of which, are the Tumefaction of the external Parts: theſe however, unleſs in very bad Habits of Body, will eaſily ſubſide, on the Application of a common Poultice, or a few Chamomile Flowers boiled in Milk; but when the Preſſure on the Parts, or the Violence done them has been great, a Suppuration, or even Mortification may enſue. In the former, the Method juſt mentioned will aſſiſt the Maturation, which may, when compleat, be evacuated by the Lancet. In the latter, the Cataplaſma e Cymino, or a little Theriaca may be neceſſary: a Decoction of Bark with Myrrh ſhould be given internally, and the Eſchars may be occaſionally ſcarified, to aſſiſt their Separation.

But the internal Parts, as the Vagina, Veſſica, Rectum, and Os uteri, will be as ſubject as the external, to Injuries of this Nature; ſince the

the long Confinement of the Child's Head, or the Means made uſe of to relieve it, is often the Cauſe of Tumefactions, Inflammations, and even Mortifications of the Parts ſo compreſſed; for the Preſſure being reciprocal, the Fibres and Veſſels of the ſoft Parts contained in the Pelvis, are bruiſed by the Child's Head, and the Circulation of the Fluids is obſtructed.

After all ſuch Labours therefore, the Patient muſt be kept as quiet as poſſible, and the Evacuations of Sweat and Urine, as well as the lochial Diſcharges, muſt be moderately promoted; and where we have Reaſon to ſuſpect a Tendency to Mortification, it would not be amiſs to have Recourſe to the Bark immediately, which, though it is in moſt Caſes a powerful Styptic, will not, if blended with uterine Medicines, obſtruct the Diſcharges. Warm detergent Injections may be uſed, or if the Danger was only in the external Parts, a Fomentation with a warm Poultice.

Lacerations,

We have before obſerved, that Lacerations of the Os uteri, will ſeldom, if conſiderable, admit of a Cure, as there is no Poſſibility of applying topical Remedies to the Part, unleſs it were ſmall Pledgets of Lint, dipped in a Mixture of Ol. Hyperici, and Ung. alth. up the Vagina with one's Finger: but the moſt likely Means of digeſting and healing the Wound, would be by detergent and balſamic Injections.

After

After theſe Accidents, an ugly fœtid Diſcharge will follow the common Evacuations, which will be eaſieſt cured, if it does not ceaſe by the End of the Month, or after the firſt Return of the Menſes, by a Solution of Sach. Saturni, injected on the Part.

When the Perinæum has been much lacerated, and the Edges of the Wound have not re-united, but have been healed over in that ſeparated State, the Woman will hardly eſcape from farther Injury at every ſubſequent Labour: we ſhould therefore when theſe Accidents occur to us, or we are conſulted when they have happened to others, in any great Degree, have Recourſe to the Needle; and it would be an Experiment worth trying, to endeavour to briug about a Re-union of the Parts, by taking off the Edges, as in the Operation for the Hair-lip, and drawing them together with a Suture, if a Woman who has had this Misfortune, could be prevailed on to ſubmit to it. We muſt always remember, that after ſuch an Accident, the Parts are liable to farther Injury, and muſt therefore act with great Caution, when we are called to a Patient under ſuch Circumſtances.

Scirrhous and Polypoſe Tumours.

From Lacerations of the Os uteri, or ſometimes from other Cauſes, a Kind of Tumour may ariſe, of a polypoſe or ſcirrhous Nature, which, if it be ſo detached from the Parts as to be pendulous in the Vagina, may by the Means of a Ligature, be happily extirpated; but if more irregular, or extended round the whole

whole Orifice, will indeed be difficult of Cure. The truly ſcirrhous Tumour will rarely admit of any relief; as it moſt commonly degenerates into a cancerous Ulcer, which, from the Pain it excites, impairs the Conſtitution, and in the End, deſtroys it. In theſe Caſes, Medicine will ſeldom do more than palliate the Urgency of the Symptoms; detergent Injections however, may be tried, and anodyne and detergent Medicines, blended with Balſamics may be uſed.

The polypoſe and ſcirrhous Tumours, are commonly hard, indolent, and free from Pain, but will ſometimes ſuppurate and degenerate into Ulcers or cancerous Sores, which are extremely painful. A ſcirrhous Tumour yields an uneaſy Senſation, and Weight in the Hypogaſtric Region, when the Patient ſtands or walks, Difficulty of lying on the oppoſite Side, if the Tumour be partial; Preſſure on the Rectum or Bladder, in Proportion as which Side of the Os uteri is moſtly affected, and a Pain, when lying in any other Poſture than on the Back. The Menſes are moſt commonly ſuppreſſed, or very pale and in ſmall Quantity, though ſometimes there will be a conſiderable and dangerous Hæmorrhage.

Broths, with Eryngo and Aſparagus Roots, with Agrimony, Pimpernel, Water Creſſes, and other Vegetables of that Claſs, may be given when the Tumour is ſmall, recent, and void of Pain, with the tartarous, chalybeate, and vitriolic Salts in large and frequent Doſes; Baths alſo, may be of Service. We had Reaſon to flatter ourſelves, from Dr. *Stork*'s recom-

recommendation of the Cicuta, that a Specific was at laſt diſcovered, for the Cure of this terrible and deſtructive Malady, but the Event has by no Means anſwered our Expectation. In the Beginning the Hemlock may perhaps do ſomething, but we can by no Means rely upon it, when the Diſeaſe has continued any Time, or has made any conſiderable Progreſs; it ſhould not however be abſolutely rejected, as it may ſometimes happen, that a Medicine may ſucceed in one particular Conſtitution, that has failed in a thouſand others.

Cancers.

Theſe Tumors, in Time degenerate into abſolute Cancers; the Skin that covers them grows thinner and thinner, till by Degrees, a Fiſſure is made, the Lips of which are retorted, and it diſcharges an Ichor, or acrimonious Seroſity, and is ſurrounded by a looſe, fungous Fleſh; the Matter diſcharged from it never becomes Pus: a putrid Sanies, ſomething ſimilar to this Ichor, will be evacuated from an Ulcer of the Uterus, where the corrupted Surface is pretty conſiderable, and this alſo, is an almoſt incurable Diſorder.

It is not in the Power of Medicine to do more than palliate in this Caſe: Narcotics muſt therefore be freely uſed; the Body muſt be ſometimes gently purged, and if the Menſes are ſuppreſſed, the Patient ſhould now and then loſe a little Blood: all Fleſh Meat and Sauces are bad; the Milk Diet ſhould be rigidly obſerved, unleſs now and then varied with a vegetable Broth,

Broth, or Sallad of Chervil, Creſſes, Watermint, and the like: a Decoction of Bark with Myrrh, may be uſed; and emollient and detergent Injections thrown up; the Solution of Sach. Saturni will cleanſe, and frequently bring off ſome Portions of the fungous Fleſh.

Herniæ.

From too great and unneceſſary Force exerted, in the Time of Labour, an Exomphalos, or a Herniæ Inguinalis may be produced, to prevent which, we muſt always caution our Patients not to exert themſelves too much, though it is neceſſary in the Time of Pain, that they ſhould aſſiſt the propelling Effort, as much as their Strength will ſafely allow.

The Exomphalos is an Inconvenience, that will admit only of a palliative Cure, by means of a Compreſs and proper Bandages: the Patient ſo afflicted, ſhould be rather abſtemious, uſe but little Exerciſe, and keep her Body cool and open; and in the Agonies of any future Labour, ſhould have the Tumour properly ſupported and compreſſed during the Pains, and after Delivery be kept low and quiet, leſt an Inflammation ſhould be excited, which under ſuch Circumſtances, might be fatal.

The Hernia Inguinalis, is ſeldom ſo dangerous in Women as in Men, but will even in them, ſometimes require an Operation; on that however, it is not my Buſineſs to enlarge, though it is neceſſary to give ſome Cautions towards preventing the Neceſſity of it. As ſoon therefore,

fore, as we are called to a Woman, who from the too ſtrongly exerted Efforts of Labour, or from any other Cauſe, has met with this Misfortune; let the Abdomen be emptied with a Glyſter, let her be blooded, the Inteſtine be reduced, and a proper Truſs, or Bandage be applied as ſoon as poſſible, which Bandage muſt not be thrown aſide while there is the leaſt Appearance of the Tumour, or the leaſt Danger of its Deſcent remaining; and in any future Labour, it muſt be as cautiouſly defended, as the Caſe above recited.

There is a Species of Hernia, to which Women alone are ſubject, ariſing from a general Relaxation in thoſe who have had a Prolapſus Uteri of long ſtanding, or an immoderate Fluor Albus: in this Caſe, the Inteſtine falls, down between the Rectum, and the Vagina and Uterus, forming a large Tumour in the Perinæum, and protruding alſo the lower Part of the Vagina. As it is ſcarcely poſſible in this Caſe to apply any Bandage or Suppoſitory equal to the Intention, the utmoſt we can do, is to reduce the Tumour as much as poſſible, by laying the Woman in ſuch a Poſture, as that the Bowels, by their own Weight, may fall again into the Abdomen, aud to keep her in that Poſition for ſome Time, to prevent their ſinking again into the Pelvis: the Diet muſt be light and ſtrengthening, the Mind be kept quiet, and the Body open.

This Accident however is ſeldom perceptible, and never very troubleſome, but in a State of Pregnancy, or in the Time of Labour; on which

which Occaſion it will ſometimes furniſh a Cauſe of Protraction, and muſt be reduced before the Birth can be ſafely accompliſhed: the two Fore-fingers of the Right Hand in the Vagina, and the Thumb in the Anus, will generally make a ſufficient Compreſſion on the Tumour, to effect its Reduction, which muſt only be attempted in the Remiſſion of the Pains.

Incontinence of Urine.

The Veſſica Urinaria, is expoſed to Injury by the Uſe of Inſtruments, or the Preſſure of the Child's Head, when confined in the Paſſages for any Time; as from either of theſe Cauſes a partial Mortification may happen, or a Relaxation of its Sphincter enſue: and by the Uſe of Inſtruments, (if the Precaution of firſt introducing the Catheter be neglected) the Bladder may either in fixing or extracting the Child with them, be ruptured in a Manner that will admit of no Relief.

An Incontinence of Urine, will be the Conſequence of either of the above Miſfortunes: and we ſhall have little Reaſon to expect from Medicine even a Palliative in this diſtreſſed and troubleſome Situation; however, we may try if any Thing can be done by Tents dipped in detergent Balſams, and digeſtive Liniments; by the Uſe of the Cortex, and ſmall Doſes of Tinct. Cantharid. or by a Bliſter applied to the Coccyx, which is an Expedient ſtrongly recommended by ſome Practitioners, not only in this Caſe, but alſo in the Cure of an obſtinate Fluor-albus. The Perſon ſo afflicted, ſhould live as ſparingly as poſſible, uſe but little Exerciſe, and conſtantly wear a Cloth with a Sponge to abſorb the Urine.

SECT. V.

Various Species of falſe Gravidation, or Diſeaſes aſſuming the Appearances of Pregnancy.

THE Uterus and its Appendages are equally ſubject to Tumours and Diſeaſes, which will carry all the Appearances of actual Gravidation: in many of theſe Tumours ariſing from Obſtruction, the Pulſation of a compreſſed Artery may give that Senſation, which may be taken for the Motion of a feeble Child; which Motion, will ſtill be more eaſily imitated by Flatulencies; and the Compreſſion of the Parts on the Blood-veſſels, co-operating (as in a real Pregnancy) ſtrengthens the Deception, by cauſing a milky Fluid to be ſecreted from the Breaſts.

As the Cauſes, ſo are the Conſequences, various and perplexing, of theſe Complaints, which may with great Propriety be deemed a Species of falſe Gravidation: as the unhappy Sufferer is almoſt always induced to believe herſelf with Child, and the Phyſician alſo, obliged to poſtpone his Judgment and Attempts to relieve, till thoſe Attempts are perhaps through Delay, or the Want of a perfect Knowledge of the Diſeaſe,

Diſeaſe itſelf, (which is ſeldom, if ever to be clearly comprehended) rendered ineffectual.

A cranous Subſtance, or a Dropſy of the Uterus itſelf; a ſchirrous, cancerous, or œdemetous Tumour in that Veſcus, or any of its Appendages; the Retention and Increaſe of a Placenta from a Miſcarriage or premature Labour; an extra uterine Fœtus; an Obſtruction and Enlargement of the Fallopian Tubes; or a Dropſy of the Ovaria; may be the immediate or proximate Cauſes of theſe deceptive Symptoms; and the Conſequences, a fatigueing, lingering, and perhaps incurable Tumour, which muſt ſooner or later deſtroy the Patient.

A carnous Subſtance, either from the Retention of a diſſolved Embryo in the Form of a Mole; or from the Retention and Increaſe of a Placenta, after a Miſcarriage or premature Labour; may in a good Conſtitution be thrown off, and the Patient recover: a Dropſy of the Uterus itſelf, will not ſo readily be overcome, even in the beſt and ſtrongeſt Conſtitution, unleſs a Cure could be effected by draining off the Water by a Canula, introduced at the Os internum. Frequent Purges of Jalap and Nitre, with other Diuretics, muſt be tried, and the Shock of a powerful Emetic may be of Service. If the Water can by theſe Means be evacuated, the Conſtitution muſt be afterwards ſtrengthened by Preparations of Steel, Bark, and aromatic Bitters; Air and Exerciſe muſt be chiefly relied on, and the Cold-bath would be of infinite Service.

Schirrous

Schirrous or cancerous Tumours at the Os uteri, may, by Injections, or Excication (if they are detached and eaſily to be ſurrounded, perhaps be mitigated; but the Caſe is truly deplorable, when Diſeaſes of that Kind poſes the Fundus, or any Part of the Ligamenta uteri, or Parietes of the Pelvis: and we can do no more in the Beginning, than regulate the Diet, and promote the neceſſary Evacuations, or in the Progreſs, and laſt Stage of the Diſeaſe, than adminiſter Anodynes to lull the Pain.

An extra-uterine Conception, may with as much Propriety as either of the foregoing Afflictions, be deemed a Species of falſe Gravidation: in this Caſe however, we ſhall be more certainly acquainted with the true Cauſe of the Tumour, than in either of the foregoing, as the Motion of the Fœtus will be more evident and powerful, than any convulſive Spaſms from Irritation, or any Flattulencies can be, yet our Hopes of affording Relief will be equally vain, as this is a Caſe, wherein our Knowledge of the Cauſe will do very little towards helping us to effect the Cure.

An Obſtruction or Enlargement of both or either of the Fallopian Tubes, may occaſion thoſe Parts to ſwell, and occupy the lower Part of the Abdomen; or a Tympanites uteri; may in the ſame Manner aſſume the Appearances of an actual Pregnancy; either of theſe Cauſes however, may by proper Evacuations, be reduced; but a Dropſy of the Ovaria, which is the moſt common Species of falſe Gravidation,

tion, will not ſo readily ſubmit to the Power of Medicine.

A Dropſy of the Ovaria ariſes from an Obſtruction of one or more of the Ova, the Coates of which, from the Lodgment of the obſtructed Matter, become ſo diſtended as to weaken and deſtroy its Texture, which being ready to burſt, Nature ſupplies with ſome Veſſicles or Bladders for the Reception of the Humours, which at length breaking and emptying themſelves into the Cavity of the Abdomen, produce Symptoms reſembling thoſe of an Aſcites.

Mead obſerves, that there is no Species of Dropſy worſe than that of the Ovaria in Women, for theſe Organs firſt grow ſchirrous, then inflamed, and at length gangrened; they ſwell to a vaſt Size, being gradually ſtretched by the Juices iſſuing from their burſted Lymphatics, which are very numerous; hence, ſays he, this Diſeaſe is very ſeldom cured.

We have a Hiſtory however, in the *Philoſophical Tranſactions*, No 387, of a Cure of this Diſorder, by a large Section, performed by Doctor Houlſtoun, on a Woman of fifty-eight Years of Age. Other Inſtances of a Cure by Exſcication have been recorded, but the Examples are ſcarcely ſufficient to authoriſe the Attempt; nor is there much to be expected from Cathartics or diuretic Medicines, unleſs we knew how to excite ſuch a Stimulus, as could make the abſorbent Veſſels take up the Fluid, and diſcharge it by the common Emunctories.

The

The gradual Diſtention of the Abdomen, in this and the preceeding Caſes, with many other concurring Circumſtances, induce every Woman, afflicted with either of them, for ſome Time at leaſt, to conclude herſelf with Child: all which Symptoms will ſometimes alſo be produced by mere Flatulencies; for the Uterus may be ſo inflated with Wind, as to ſwell and increaſe gradually, as in Women with Child; the Menſes at the ſame Time being totally ſuppreſſed, or flowing but ſparingly.

In this Caſe, and in ſome of the foregoing, chiefly however, thoſe which affect the Uterus itſelf, the Breaſts have Milk in them, which Circumſtance, more than any of the other Symptoms, induces Women in this Condition to believe themſelves with Child, and exceeding the uſual Term of Geſtation, they flatter themſelves that they have miſtaken their Reckoning, till having continued thus for the Space of twelve, fourteen, or from thence to twenty Months, they are at laſt convinced there can be no Pregnancy in the Caſe.

Sometimes by the Uſe of Medicine, and ſometimes without, a Kind of Labour-pains are excited, and a fleſhy Subſtance, with a copious Diſcharge of the Menſes; an Evacuation of Water; or a flatulent Eruption of Wind breaks from the Uterus, and the big Belly goes off; or ſometimes, without any ſuch manifeſt Eruption or Diſcharge, inſenſibly ſubſides and the Diſorder paſſes off. The flatulent Tumours, are ſuppoſed to ariſe, from the Retention and

Fermen-

Fermentation of the Male Semen in the Uterus without Conception.

Sydenham ſays there are two Species of Tumours of the Abdomen peculiar to Women, which reſemble a Dropſy; the firſt is a preternatural Growth of Fleſh, in the Parts within the Abdomen, which ſwells the Body into as great a Bulk, as Water incloſed therein uſually does; the other has its Riſe from Flatuſes; which will not only raiſe the Tumour, but bring on other Symptoms of Pregnancy, and counterfeit a true Conception; but at length, the Tumour decreaſing by the ſame Degrees that it aroſe, evinces the Miſtake.

Yet in every Species of falſe Gravidation, there are ſome diſtinguiſhing Circumſtances, whereby they may be known after a few Months, though the particular Species can never perhaps be preciſely aſcertained.

The Tumour in a real Pregnancy, is always regular in its Progreſs as it riſes in the Abdomen, is moſt commonly in the Centre and may be circumſcribed; in a Diſeaſe, the Tumour is more univerſal, ſudden, pulpy, and not to be circumſcribed; it ſometimes ſubſides greatly, at others, is as ſuddenly augmented; it is attended with more Pain, yet is leſs weighty than a true Conception.

When the Os uteri is examined in a State of Pregnancy, it feels ſoft, ſmooth, and after the fourth or fifth Month, ſomewhat expanded, a Weight may be felt in it, and the Diſtention of the

the Fundus diſcovered; in the other Caſes, it is always very ſmall and cloſe, feeling rather hard, and almoſt impervious; nor can any Expanſion of the Cervex, or Tumour in the Fundus uteri be perceived, unleſs when there is an actual Diſeaſe in the Uterus itſelf.

From the Flow or Suppreſſion of the Menſes, there can no diſtinguiſhing Inference be drawn, as they will frequently be wholly ſuppreſſed in the diſeaſed, and in the pregnant State will flow irregularly, in ſmall Quantity, and of a pale Colour and watery Conſiſtence, which they alſo generally do in the other Circumſtances.

The Breaſts will, in moſt of theſe uterine Diſeaſes be tumefied, and contain a milky Serum; ſometimes pure Milk may be preſſed from the Nipples; however, it is neither of ſo good a Colour or Conſiſtence, or in ſuch Quantity as in real Pregnancy: nor are the Breaſts ſo firmly or uniformly diſtended, though frequently more painful; neither is the livid Circle round the Baſis of the Nipple, ſo conſpicuous in a falſe, as in a real and natural Gravidation.

SECT.

SECT. VI.

Imperfections and Diſeaſes of Infants.

INFANTS are frequenty born with Diſeaſes or Imperfections, that require the Aſſiſtance of Medicine, or become the Subjects of Chirurgical Operations; they are ſometimes ſtrangely marked and mutilated; and from the Nature of their Food, and Delicacy of their Frame, are ſubject to the Accumulation of viſcid, pituitous, and acid Phlegm, which gives riſe to many painful and dangerous Symptoms.

The Aperture of the Anus, and in Girls the Meatus Urinarius, has been found impervious, and covered by a thin Membrane, which is to be punctured with a Lancet as ſoon as diſcovered, that the natural Evacuations may not be impeded: but ſometimes theſe Impediments may depend on Cauſes too remote to be diſcovered by the Eye; and therefore, beyond the Power of Art or Medicine to remove.

From a Defect or Luxuriance of Oſſification, or from long Preſſure and Confinement, the Infant's Head will ſometimes, carry the Appearances of Miſconformation. In the former Caſe, the Fontanelle, and all the Sutures, will be

very large and open; in the ſecond, the Bones will ride over each other, and in the laſt Caſe, the Head will be moulded into a Sugar-loaf form, the Vertex or Occiput making the Apex, and the Face the Baſis of the Cone; when the Oſſa Parrietalia ride on the Os Frontis, the common Term is, MOULD-SHOT; when they ride the Os Occiputis, HORSE-SHOE Head.

Neither of theſe can of themſelves be productive of any material Evil, and are all of them to be cured, by proper Friction and Bandages: When the Scalp is tumified however, it will frequently produce ſome diſagreable Inconveniences, and will require the Application of Cataplaſms, or Liniments, of a repelling or ſuppurating Nature: They will ſometimes require the Aſſiſtance of the Lancet, or may perhaps produce a Mortification. The Head therefore, when it has thus ſuffered from the Progreſs of the Labour, ſhould be well waſhed in Brandy or rectified Spirits. Common Excoriations of the Head or other Parts, from the Effects of any Exertion in the Birth, will be eaſily cured by waſhing with cold Water, and drying them well with a little good Starch-Powder; which Method, will alſo beſt ſucceed in the common Excoriations to which Infants are ſubject; or a little Tutty or Lapis Callaminaris may be uſed on theſe Occaſions; or if the Parts are much inflamed and inclinable to a Diſcharge of Matter, a little Spermaceti Ointment may be neceſſary; in moſt of theſe Caſes the Nurſes are apt to uſe Geruſe, which is rather a pernicious Practice.

There

There is ſcarce any Diſeaſe or Diſfigurement an Infant can be born with more diſguſtful or fatal than a Spina-Biffida; which is a Defect of the Poſterior Proceſſes of the Back-bone, complicated with an external Tumour, whereby the great Nerve is robbed of its Defence, and is only covered by the Integuments and Fluid of the Tumour. Few of theſe ſurvive long, as there is no Cure, and the breaking of the Tumour, is almoſt always immediate Death. Thoſe however, who do live under this Misfortune, are generally Ideots. and in perpetual Danger of ſudden Death.

Two cures have been made by Mr. Cooper 1812

Every other Species of Mutilation from whatever Cauſe, is equally incurable; but the Diſtortion of the Hands, or Feet, may ſometimes, by proper Bandages be relieved. The watery Head, and the total want of the Cranial Bones are equally ſhocking and incurable. A partial Defect of either of the Bones, which will ſometimes happen, may be eaſily cured by proper Compreſſion to keep down the protruding Contents of the Skull, which would otherwiſe reſiſt, and perhaps, retard the Progreſs of Oſſification. At the Fontanelle alſo, the Cerrebrum may be protruded, which is equally incurable with either of the foregoing Defects.

Male Infants are ſometimes born with Inguinal Ruptures, hence called Hernia Congenita; the Cure is ſimple and eaſy: The Inteſtine is to be reduced and ſuſpended. To effect which, it may be neceſſary to ſoften and relax the Parts with a Cataplaſm, or oily Liniments; and afterwards, to apply a Bandage, with

with a propper Compreſs, or a corroborating plaiſter: let the bowels be firſt emptied by a Gliſter, and the Body is always to be kept moderately open.

Hydrocephalus.

An Hydrocephalus (according to *Boerhaave*) may either ariſe from a ſordid Collection of Water, between the external Integuments; between thoſe and the Cranium; between the Cranium and Membranes of the Brain; between theſe membranes and their Duplicatures; between thoſe Duplicatures and the Brain; between the Foldings of the Brain itſelf; and laſtly, in its Cavities: but yet without producing immediate Death.

Thus it appears, that though a native Hydrocephalus is ſpeedily mortal, an adventitious one, is not; as he informs us, that every one of theſe Species, but the laſt, may be cured, by gentle Cauterization, Terrebration, or Puncture, prudently and cautiouſly practiſed; exhibibiting, at the ſame Time, Hydrogogues and Corroboratives, internally. He tells us alſo, they are to be removed, by the external Application of Diſcutients. This Diſeaſe frequently preceeds, or accompanies the Rickets: and I cannot help thinking, the Attempt to cure would be fruitleſs, except in thoſe Caſes where the Water is without the Cranium.

Ulcer and Protruſion of the Navel.

The Funis moſt commonly dries and falls off about the fifth, or ſixth Day, ſometimes ſooner: but

but will now and then remain for a Fortnight or three Weeks; in which Caſe, there will frequently enſue a purulent Ulcer, or a Protruſion of the Part; the former, is to be healed by the milder Digeſtives; the latter, to be confined by a proper Bandage, with a ſmall Compreſs, or a Shilling ſewed in a broad Tape, and worn as a Belly-band.

Tumefaction of the Breaſts.

The Breaſts of young Infants, will ſometimes accumulate a milky Serum, and be very much inflamed; turgid, and painful: in which Caſe it will be ſometimes neceſſary to apply a ſoft Poultice; but a Liniment of Linſeed Oil and Wax, will moſt commonly ſoften and repel the Tumour, which ſhould never, if it can poſſibly be avoided, (eſpecially in a Girl) be ſuffered to ſuppurate.

Gripes.

The Throat, Stomach, and Inteſtines of the Fœtus, are loaded with a viſcid Mucus, which in the lower Parts is extreamly tenacious, and of a profound green, or rather blackiſh Colour; this in Term of Art, is called the Mecomium, and to the Retention of this Excrement, is owing moſt of the Diſeaſes, if not all, that afflict Infants, ſhortly after their Birth: ſome few indeed, may be born with convulſive, or epileptic Symptoms, ariſing from the long Compreſſion of the Head, the Delicacy of the nervous Syſtem, or ſome other inſcrutable Cauſe. But theſe are not very frequent, and few of them long ſurvive. In ſuch Caſes, a ſmall Bliſter between

the

the Shoulders, may be of ſervice; though it is ſomething ridiculous to apply them promiſcuouſly on every new born Infant, who may, or may not, require it; the Complaints that Practice is intended to prevent, depending upon Cauſes which ſuch a Stimulus, nor the Evacuation it occaſions, cannot affect, as ariſing only, from a Retention of Excrement in the Primæ-Viæ.

When this Viſcid Phlegm in the firſt Paſſages, and Meconium in the lower Inteſtines) is not properly and early evacuated, it will ſoon acquire a more viſcid, acid, acrid, or putrid State; and from its irritation of thoſe tender Organs, will excite a febrile Heat, Hiccough, Tumour and Tenſion of the Abdomen, ſevere Gripes, Convulſions, and epileptic Spaſms: all which Symptoms will readily diſappear, on adminiſtering a Glyſter, or gentle Purgative, with proper Doſes of Alkaline Abſorbents. The ſame Symptoms will be afterwards produced by Indigeſtion, or the ſpontaneous Coagulation of the Milk, on their tender Stomachs; their Food being all of an acceſſent Nature. Theſe are likewiſe removed by the ſame Remedies: but it will be ſometimes neceſſary to add to the abſorbent Powders, ſmall Portions of Aromatics, or to give them in carminative Waters, to aſſiſt and ſtrengthen the digeſtive Faculties.

Erryſipelas.

An Erryſipelas will ſometimes attack young Infants, in which the inflammatory Symptoms will run ſo high, as to threaten immediate Danger; and we cannot, on account of their tender

tender Age, have recourſe to antiphlogiſtic Remedies: topical Applications therefore, muſt be tried; emollient Fomentations and cooling Liniments; and theſe muſt be aſſiſted, by the internal Uſe of Bark and Nitre, in ſmall, but frequent Doſes, with a Glyſter, if neceſſary. This Species of Inflammation moſt frequently follows the Suppuration of the Funis, and in that Caſe, generally Mortifies, and deſtroys the Infant.

Red-Gum.

Moſt Infants, ſoon after their Birth, have a ſmall cutaneous Eruption; to which the old Women have given the Name of Red-Gum. The Pimples are generally very ſmall, and of a deep Red, or inflammatory Colour, and ſometimes come out in Cluſters all over the Body; though generally moſt conſpicuous on the Face, Neck, and Extremeties. It is neceſſary to promote this Eruption, by mild Cordials, and correct the general acidity of the Humours, from which it may ariſe, by Alkaline Abſorbents, or ſmall Doſes of neutral Salts; ſometimes, a few Grains of the pulv. Cont. comp. may be of ſervice.

Apthæ.

It is uſual alſo, for Infants, a few Weeks (and ſometimes a few Days only) after their Birth, to be afflicted with the Thruſh, or ſmall round, ſuperficial Ulcerations, of the Lips, Mouth, Fauces, &c. chiefly on the Extremeties of the excretory Ducts, from the Salival Glands, or thoſe which ſecrete the ordinary Mucus of thoſe Parts,

Parts, and of the Stomach and Inteſtines, which are alſo affected by this Diſorder.

When theſe apthoſe Ulcerations appear in ſolitary Puſtules, on the Tongue, Lips, &c. and are white, pellucid, or almoſt of the Colour of Pearl; they have no great Degree of Malignity, and will eaſily be cured; but when they ſeem to ariſe from the Stomach, appearing at the Fauces, and ſpreading upwards, to the Mouth, with a thick tenacious Cruſt, or are of an opague Nature, they are more malignant; but if brown, yellow, or livid, they are more ſo; and if black, are commonly mortal.

The Apthæ is occaſioned by the predominant Acid in the Primæ-Viæ, vellicating the excretory Ducts of the Glands, before mentioned; or by the viſcidity of the Humours obſtructing them, and deſtroying their Functions. Thus the Orifices of the lacteal Veſſels, may be ulcerated, or obſtructed, by this acidity, or viſcid Phlegm, as to be rendered inactive, or uſeleſs for a Time; and the Conſtitution, will of courſe, be deprived of its due Nouriſhment; and a Mortification may enſue, from the impoveriſhed State, or languid Circulation of the Fluids.

The Indications of Cure therefore, are evidently theſe; to correct the predominant Acid; to purge off the viſcid Phlegm; and to ſeparate the tenacious incruſtations of the Ulcers. The firſt Intention will be anſwered, by the teſtaceous Abſorbents, or Solutions of the fixed Alkaline Salts; in the ſecond, a few Grains of Rhubarb, with

with a Grain of Cinnamon in Powder, and a ſuitable Proportion of Magneſia, may be adminiſtered; and oily balſamic Emulſions, or Broths, and thin Gruels, with an emollient Glyſter or two, at proper Intervals, may be uſed to aſſiſt the Separation of the putrid Sloughs. The Mouth may be cleaned by cloths dipped in Sage-tea, or mild Solutions of Allum or Borax, in warm Water.

Dyſentery.

The foregoing Diſeaſe is moſt frequently preceeded, or followed by a purulent Kind of Dyſentery, called the Watery-Gripes, ariſing from the ſame predominant Acid, to which almoſt all the Diſeaſes of Infants owe their Origin: the Stools will be very copious, frequent, thin, and acrid; they will frequently excoriate the Parts about the Fundament, and the Thighs alſo, if the Clouts are not ſpeedily removed: they are accompanied with windy Eructations, and are thrown off ſometimes, with great velocity.

In this Caſe, there is probably an Obſtruction in the pancreatic, or hepatic Ducts, which occaſions a deficiency of thoſe Fluids, which ſhould be mixed with the Aliment, for the purpoſes of Concoction; and if this Diſeaſe remains, it excoriates the whole internal Surface of the inteſtinal Canal, raiſes an Inflammation, and excites Convulſions, which frequently occaſion the Infant's Death.

On the firſt Approach therefore, of this Diſeaſe, the predominent Acid is to be corrected, and carried off; for this Purpoſe, adminiſter proper Doſes of Teſtacea with Rhubarb, and gentle Aromatics. Let the Food be of the aſtringent, and rather of the alkalecent Kind: the common Wafer-paper boiled in Water, and moderately ſweetened with double refined Sugar, or a little Poland-Starch, or Sea-buſcuits prepared in like Manner, with a little Chicken-water, at Intervals, is the beſt Form of Diet on theſe Occaſions. If the Diſeaſe is obſtinate, give a Grain of Ipecacuanha, with a little Magneſia, or Gaſcoign's Powder, and throw up an Ounce of Starch, or Wafer-paper, diſſolved in Rue-water; Anodynes are often highly neceſſary; and the Spec. e ſcord. cu. op. may be ſometimes uſed to advantage; Hartſhorn, or Calves-foot Jelly, may be given as Food, or adminiſtered by Way of Gyſter, to compleat the Cure; and the Solution of candied Eryngo-root in Barley-water, is a very good reſtorative drink.

Dentition.

Dentition will in ſome Children, excite very painful and alarming Symptoms, to mitigate which, it may be neceſſary, to eaſe the Gum with a Lancet, if the Tooth appears to be near the Surface; otherwiſe, the Wound may cloſe over it, and by growing more Callous, renew, if not increaſe the Inconvenience. The Body ſhould always be kept Lax, and the Primæ-viæ properly ſtrengthened, and guarded againſt the Accumulation of acid Cru lities.

When

When the Inflammation in the Gum ſeems violent, and the Teeth are not far enough advanced to be uncovered by the Lancet, a Bliſter may be ſerviceable; and a well ſaturated ſaline Mixture, with Magneſia may be given; to which may be added, if the Child is very fretful, and reſtleſs, a gentle anodyne. But we muſt remember, that it is a Maxim of *Boerhaave*'s, that in the Diſeaſes of Infants, Opiates are rarely, and not without great Caution to be uſed. Medicines of an attenuating Nature, and all Volatiles and Stimulants, muſt alſo, as much as poſſible, be avoided.

Fitts.

From either of the preceeding Cauſes, or even from a relaxed and enervated Frame, inherited from the Parents, or contracted in the Womb; Infants are ſubject to convulſive, or epileptic Spaſms, in the Mittigation, or Cure of which, the primary Cauſe, muſt if poſſible, be diſcovered, as on the Removal of that alone, our Hopes of Succeſs will depend. It is not uncommon, in moſt of theſe Caſes to bleed; but I muſt own, I think it a bad Practice, eſpecially in the Fit; as the Loſs of Blood, unleſs in very robuſt, or plethoric Children, muſt impair the Vis-vitæ, and conſequently render the Conſtitution leſs able to ſupport ſuch Conflicts: a Bliſter, where the Fits do not ariſe from Crudities, or Indigeſtion, may be of Service, where they do, it will avail nothing; Evacuations being in this Caſe, indiſpenſably neceſſary.

Fits

Fits in Children, ariſe from various and contrary Cauſes, and will be more, or leſs powerful in Proportion to the Degree of Irritation, whereby they are excited: the Extremities will be frequently, during the Spaſm, ſtrangely diſtorted; and when they ariſe from an Inflammation in the Bowels, they occaſion a Convolvolus of the Inteſtines, which is generally mortal.

In the Fit, two or three Drops of Spirits of Hartſhorn, may be adminiſtered in a little Water, or the Child might be held over the Steem of hot Water, or placed in a warm Bath; Glyſters of emollient Broths, with Rue, and a few carminative Seeds, will be of Uſe: and at Intervals, a Mixture of Rue-water, with the Soot Drops, or a few Grains of Muſk; teſtaceous Powders, with ſmall Doſes of Caſtile Soap and Caſtor; a Grain or two of Camphire, may ſometimes be ſerviceable. *Boerhaave* recommends Soap, in all the Diſeaſes of Infants.

Venereal Taints.

Where either of the Parents have been afflicted with it, Children will very early ſhew evident Marks of a venereal Taint; which either appears in Excoriations and Ulcers of the genital Parts, or in Eruptions or Puſtules, of an highly inflamatory, or Copper-coloured Appearance about the Face, Neck, Breech, or Extremities; the Mouth and Fauces being generally at the ſame Time inflamed, or ulcerated. If the Child ſucks, the Mother, or Nurſe, muſt be put on a proper Regimen, and Method of Cure; the Child ſhould drink frequently, of the

the Decoction of Sarſaperilla; if it does not, it muſt take frequent ſmall Doſes of Mercur. Alkalizat. with the Sarſaperilla Drink, which may perhaps effect a Cure; the Sores muſt be dreſſed with a mercurial Cerate, and the Parts be kept as clean as poſſible.

Scrophula.

There is nothing more perplexing, or troubleſome, than the ſcrophulous Tumours, with which many Children are affected, and which frequently ariſe from hereditary Taints, or from a natural Viſcidity of the Blood and Humours. various Methods of Cure, have been recommended and practiſed in theſe Caſes; but none of them have yet been found adequate to the Cauſe.

In general, it is of bad Conſequence to ſuppurate, or open ſuch Tumours; and where their Maturation cannot be prevented, they ſhould always be left to break of themſelves, and be only aſſiſted, either before, or after that Event, by the mildeſt Applications; as the Conſequence of the Lancet, or Eſcharotic Medicines, is a troubleſome Inflammation and Pain, which induces an Induration of the neighbouring Glands.

The beſt internal Remedy, is a Mixture of Antimony with the Soder, or Æthiops Vegetabile of *Ruſſell*, and a Fomentation of the Solution of Soder, or Sea-water: or a Plaiſter of Hemlock with Ammonicum, may be of Service.

Small-

Small-Pox.

When Infants, or young Children, are ſeized with the Small-Pox, their real Ailment can ſeldom, from the Symptoms, be diſcovered, till the Puſtules actually appear; yet we ſhould always be upon our Guard, in all febrile Attacks, eſpecially after Dentition, as the incautious Uſe of febrifuge Medicines, will always, where any Eruption is to be thrown out, prejudice the Patient: the Fever which preceeds ſuch Eruption, being a Symptom only, not a Diſeaſe: it is, as *Sydenham* defines it, an Effort of Nature, to free the Conſtitution from ſome morbid Affection.

In Children, this Diſeaſe is frequently preceeded by two or three ſtrong convulſive Spaſms, which are a favourable Diagnoſis; the ſubſequent Eruptions being generally of the more diſtinct, and benign Nature. In ſome Conſtitutions, the Small-Pox is hereditarily fatal; but in Common, the Event depends on the Texture of the Blood, and Diſpoſition of the Fluids in general. Children whoſe Juices are in an acid, or putrid State; thoſe who have been fed high, and abound with groſs, and viſcid Humours, will frequently be the Victims of this Diſtemper.

When on the firſt Appearance of the Puſtules, the Skin is loaded with a farinacious Scurf, or interſperſed with purple, or livid Spots; or the Fauces ſeem inflamed, or loaded with the peccant Matter; when the Voice is weakened, and the Child appears in Danger of Suffocation, the

the diſeaſe is mortal: when the Puſtules appear diſtinct; riſe up in a flattiſh Form, and are inflamed at the Bottom, there is hopes of a due Maturation, and happy Recovery.

When the Blood is tenacious and inflamatory, Bleeding would be of Service; when tending to a putrid State, highly improper: gentle Emetics, and proper Purgatives are at all Times uſeful; and a due Perſpiration ſhould be promoted: in the confluent, or chryſtaline Pock, Bliſters have their Uſe; but they ſhould be made of the Paſte, not the Plaiſter: a too rapid Pulſe muſt be reſtrained, a too languid one, ſupported: but the Chief of the Cure depends upon the Drink; and it will ſeldom be of any Conſequence, what is adminiſtered on this Occaſion, if we can but make them ſwallow enough.

'Till the Eruption is compleat, and they begin to fill, the Drink muſt be thin and diluting; Maturation is then to be promoted by balſamic Drinks and Medicines; and on the Turn, the Vis-vitæ muſt be ſupported, that the Viſcera may not be inflamed, or obſtructed, by a Tranſlation of the variolous Matter: gentle Subacids are conducive to this End, and the Extract, or Decoction of the Bark, ſhould be adminiſtered on the Recovery, to brace and reſtore the Conſtitution: proper Purges, when the Scales begin to fall off, ſhould not be omitted; a Stool, or two, ſhould always be procured, at, or about, the Turn.

Meaſles.

The Meaſles are a florid Eruption from an inflammatory billious Fever, and always require the loſs of a little Blood, and ſometimes alſo the Application of a Bliſter: they are eaſily foreſeen, by a Cough and Inflammation of the Eyes, conſtantly attending the other febrile and plethoric Symptoms; they are ſeldom of long Continuance; but frequently leave behind them, the Seeds of chronical, or hectic Diſeaſes: for, as in this Caſe, there is no abſolute Depoſit of concocted Matter, on the Surface of the Body; the morbid Humours are conſequently more apt, and likely to fall on the principal Viſcera, if the Eruption has not been compleat and well ſupported.

On the Decline therefore, of this Diſeaſe, the Patient ſhould again be blooded, the Cough muſt be particularly attended to, and the Conſtitution in general braced, and ſtrengthened: balſamic Emulſions, and pectoral Drinks, with the ſham Aſſes-milk, will be of great Service for the Cough; when that abates, Subacids muſt take Place; Purges muſt not be omitted; a clear Air, and gentle Exerciſe, will promote the Recovery.

Hooping-Cough.

The Hooping-Cough, is a truly convulſive Affection, excited by the Irritation of a viſcid, or acid Phlegm on the Fauces and Trachea, actuated by ſome inſcrutable Principle; for this Diſeaſe is viſibly Contageous: bleeding is indiſpenſably

penſably neceſſary, the Stomach and Bowels muſt be cleared, and the Body kept open: Balſamics muſt be blended with the nervous, and antiſpaſmodic Medicines. Valerian and Bark in ſmall Doſes are uſeful, a Bliſter may be neceſſary; two or three Drops of Æther, or Spt. vit. dul. in a little Wine and Water twice a Day, will ſometimes be of infinite Service. *Cheyne* has a Remedy made of live Wood-lice, macerated in Mountain, clarified and boiled to a Syrup, which he much extols: Change of Air, with pectoral and diluting Drinks, and a light and ſpare Diet, are naturally indicated; an Infuſion of Cup-moſs, with Colts-foot, is a very good Drink on this Occaſion.

Rickets.

About the Tenth or Eleventh Month, when the Infant ſhould begin to walk, its Progreſs will ſometimes be retarded, and its Habit enfeebled, by the Attack of a very perplexing and obnoxious Diſeaſe, called the Rickets; which ariſes from a redundant Acid, in the blood and Juices, induced by Confinement, Want of Exerciſe, and Neglect of Evacuations.

Boerhaave (whoſe Hiſtory is the moſt accurate and deſcriptive) informs us, that this Diſeaſe was firſt diſcovered in Britain, in the Middle of the laſt Century, and extended itſelf over all the northern Provinces of Europe; that Children are never born with this Diſorder; that it ſeldom appears before the Ninth or Tenth Month, and never after the ſecond Year, but very frequently between thoſe Periods.

In this Diſeaſe, the Bones are ſoftened, and as it were, melted down and ſuſceptible of any Impreſſion; conſequently, are always diſtorted, if the Cauſes are not removed: the bulbous Extremities of the Wriſt and Ancle-bones are inlarged; the Skull generally expanded; the Digeſtion and Appetite impaired; and the Child is dull, heavy, liſtleſs, and averſe to Motion.

The internal Parts, as the Liver particularly, are frequently over-grown in Proportion to the Body: the Radius and Ulna, the Tibia and Fibula, become bowed; as ſometimes alſo, the Femur and os Humeri (tho' not ſo frequently) will do. Some Authors aſcribe this Diſeaſe, to an Obſtruction of the Medulla Spinalis, and a Debility of the Nerves, ariſing therefrom. But moſt Writers are unanimous, in the Indications and Method of Cure. Few Children have this Affliction, but through the Negligence or Ignorance of their Nurſe; unleſs where it happens in Conſequence of long and enervating Diſeaſes. Air, Exerciſe, proper Diet, and neceſſary Evacuations, as they would always prevent, ſo they will contribute greatly to the Cure of this Diſtemper: to compleat which, Anti-acids and Abſorbents, neutral ſaline Mixtures, and the Cortex will be of Service; but the moſt eſſential Thing, is the Cold Bath: a humid Regimen, is improper, the Diet ſhould be chiefly Jellies, fleſh Meats, and Vegetables; the Drink Ale, or red Wine and Water.

The Abdomen in this Diſeaſe commonly ſwells, and accumulates in the Paſſages, a pituitous

tuitous and viſcid Phlegm, which affords a Nidus, for the Production of numberleſs minute Inſects, bred from the Eggs of ſimilar Inſects, ſwallowed by the Child, in fruit, or other Aliment, and which the digeſtive Faculties of its Stomach, had not Power to deſtroy, or expel.

Worms.

Worms, are likewiſe produced and nouriſhed by the ſame Sort of viſcid Humours proceeding from other Cauſes, and are ſometimes, productive of troubleſome and alarming Symptoms; they devour the Chyle, and finer Parts of the Aliment ſwallowed, and thereby produce a Fever from Innanition; they ſometimes, perſonate the Inteſtines themſelves, and produce a Mortification.

To deſtroy theſe noxious Vermin, ſuch Medicines muſt be adminiſtered, as their Stomachs cannot digeſt; and ſuch Purges, as will diſlodge, and bring them away: the digeſtive Faculties muſt be reſtored, and ſtrengthened, and the Conſtitution in general braced. For the firſt Intention, Powders of Æth. Minerale with Rhubarb, or Mercur. Alkalizat. in moderate Doſes, or an Apozem, made by boiling Quickſilver in Water, and ſweetened with Honey, may be given. The ſecond will require, Purges of Jallap, Rhubarb, and Callomel; aromatic Bitters, in ſmall Quantities, or the Extract of Bark, and the Cold-Bath, will anſwer the third Intention, and Compleat the Cure.

Chori,

Chori, Sancti Viti.

Children and young Perſons, of a lax and delicate Habit, but chiefly the Females, are ſometimes afflicted with a convulſive Diſeaſe, diſtinguiſhed by the Name of St. Vitus's Dance: this however, is neither tedious or difficult of Cure; for tho' the Spaſms are frequent, and diſtort the Features, and throw the whole Frame, into very awkward and ludicrous Agitations, they readily yield to the common nervous, and anti-ſpaſmodic Remedies; which will be greatly aſſiſted by the Addition of a little Bark: and the Cold-Bath, will in a ſhort Time compleat, and eſtabliſh the Cure. This is frequently the Conſequence of, or an Attendant upon the foregoing Diſeaſe.

APPENDIX.

APPENDIX.

On the Virtues and Operations of UTERINE MEDICINES; and the powers of OPIUM and MUSK.

UTERINES comprehend all Medicines ſuppoſed to be endowed with a Power of promoting the Menſes; of cauſing Abortion, or aſſiſting Labour; and of ſupporting the Evacuations after Delivery; and may be divided into three Claſſes, Emmenagogues, Ariſtolochics, and Echbolics, or ſuch as expel the Menſes, the Lochia, or the Fruits of the Womb.

Emmenagogues are properly, thoſe which promote the Secretion and Excretion of the menſtrual Blood: now the Secretion is from the whole Maſs of Blood into the uterine Veſſels; but the Excretion, is from the Womb, through the Veſſels adhering partly about its Orifice, partly within it, and partly from thoſe of the Vagina; both which are the Conſequence, of a Diſtenſion of thoſe Veſſels, from a Fullneſs of Blood; whereby they are ſo augmented in their Diameter, that by the Force of the Heart their Orifices are at length

length dilated, and ſuffer an Eruption of red Blood. But when the Plethora is relieved, and the Force of the Heart abates, they contract themſelves again, and the Evacuation ceaſes, till by a freſh Accumulation of redundant Blood, the Veſſels are again diſtended.

That the menſtrual Blood is propelled by the Force of the Heart, is evident from hence, that if the Placenta be ſeparated from the Uterus, the Fœtus yet remaining in it, the Hæmorrhage unleſs ſhe is ſpeedily delivered, occaſions the Woman's Death; the Uterus being ſo diſtended, that the Mouths of the bleeding Veſſels cannot contract, and the Blood is urged by the Force of the Heart in a copious and unremitting Stream.

The Extremities of Arteries are divided into three Branches, whereof the middle one goes into a Vein, and the latteral ones open one into a Gland, the other into a lymphatic Veſſel: the thicker Blood, is therefore, conveyed by the firſt to the Vein, while the latteral Branches which are extremely fine, admit only the Lymph or colourleſs Parts of the Blood: but being in common with the whole valcuſar Syſtem capable of Diſtenſion from various Cauſes will occaſionally admit the red Globules to flow through them; which may ariſe from a Plethora, either exciting an Obſtruction in the Veins, or a more powerful Action, or Reſiſtance in the Sides of the Arteries; thoſe Branches being conſtructed of very delicate Fibres, and having little, or no Reſiſtance at their Extremities. Thus the Tunica-Albuginea of the Eye, in which naturally no

no Veſſels are conſpicuous, will in Caſes of Inflammation, or obſtruction, ſhew an infinite Number of Veſſels loaded with red Blood. So alſo in the Uterus, the lymphatic Veſſels, or lateral Branches of ſmall Arteries which open into its Cavity, being preturnaturally diſtended, will ſuffer an Effuſion of red Blood; as appears evident from the Flowing of the Lochiæ, which as the Veſſels contract gradually looſe their red Colour.

Three Things are neceſſary to Menſtruation in an healthy Woman; firſt, a Plethora; ſecondly, a Determination of the ſuperfluous Blood to the Womb, as the leſs reſiſting Part; and thirdly, a Fitneſs of the Uterine Veſſels for Excretion. Whence Emmenagogues may alſo be reduced to three Claſſes; of which, the firſt contain thoſe that cauſe a Plethora; the ſecond, thoſe which determine it to the Womb; and the third containing, aperient, uterine Topics. Whoever therefore, would relieve a Suppreſſion of the Menſes, ought firſt to inquire, whether there is Matter to be excreted, or whether, there is any Superfluity of Blood, for if this is wanting, the Medicines of the ſecond and third Claſs will do more harm than good.

A Plethora is produced, firſt, by every Medicine, which cauſes more Chyle to be received into the Veins from the Aliment, by the Power of the firſt Bowels, than is required for the Increaſe and Nouriſhment, or to repair the Loſs of the Body: ſecondly, by every Medicine, which ſo ſtrengthens and affects the ſecond Bowels, that they turn the Chyle into Blood; and thirdly,

ly, by the Removal of Cauſes, which attenuate and diſſipate the collected Blood. We have therefore, three different Kinds of Medicines, comprized under the firſt Claſs of Emmenagogues, the firſt of which are, thoſe which increaſe the Force of the firſt Bowels, or thoſe appropriated to Chylification: in which alſo, are to be enumerated, thoſe which diſſolve the ſluggiſh Fœces; and thoſe which purge them out when diſſolved, by a Stimulus.

We know that the whole inteſtinal Canal is lined with a certain Mucus, to lubricate the Paſſage, and defend their fine internal Membrane from the irritable Matter of the Aliment. If this Mucus is too thick and adhæſive, it obſtructs the Orifices of the Veſſels, and hinders the Paſſage of the Chyle into the Lacteals: whence ariſes an Inanition, or Atrophy, which is the Reverſe of a Plethora; therefore ſuch a Mucus is to be diſſolved and expelled, before any Thing can be attempted towards increaſing the Force of the firſt Viſcera.

This Mucus may be diſſolved by any of the aromatic or fœtid Gums, called Uterines; which being viſcid and ſaponaceous, adhere to and mix with the Pituitæ, and diſſolve it, and at the ſame Time ſtimulate and promote its Expulſion. Therefore, Gum Ammoniacum, Bdellium, Galbanum, Myrrh, Saggapenum, and Opoponax, are by all called Uterines; as they are eaſily diſſolved by the Heat of the Body, and while they remain in that State of Solution, their aromatic or acrid Particles exhale, and gently ſtimulate and deterge the Viſcera. They

do

do not act however, by any power directly appropriated to the Womb; but by their attenuating, or diſſolving Quality, being ſaponaceous, aromatic and friendly to the Nerves.

We muſt therefore, to relieve a Woman whoſe Menſes are ſuppreſſed for Want of the requiſite Plethora, firſt adminiſter thoſe fœtid Gums; which will be uſeful in all hypochondriac and hyſteric Patients, by diſſolving and diſcharging that Mucus, which by obſtructing the Orifices of the lacteal Veſſels, deprives the Body of its due Nouriſhment. All alkaline, or other fixed Salts, may produce alſo the ſame Effects; and have beſides this Peculiarity, that they ſoon paſs off. To this Claſs alſo belong, compound fixed Salts, as Borax, Sal Ammoniacum, vitriolic Tartar, Sal Polychreſtum, &c. therefore a Solution of either of theſe Solts, either in Rue, Pennyroyal, or common Water, would be uſeful to take after the Gum Pills. All Volatile Alkaline Salts, and Spirits; and all Soaps whatſoever are very powerful Attenuants; for they approach to the Nature of Gums, and being capable of mixing and uniting with the Fluids of the Body, are of great Efficacy in promoting the Menſes, and diſſolving the viſcid Mucus of the Inteſtines.

Theſe are deterſives of the firſt Paſſages; but more powerful ones are ſometimes required, to expel the diſſolved Mucus; ſuch as Aloes, Rhubarb, Colloquintida, Jallap, and above all white Bryony; which have acquired the Name of Uterines from their Effects, as they at the ſame Time diſſolve and expel. Thus to expel

the diſſolved Pituitæ, either of the above Purgatives may be uſed ſingly, or blended with each other, according to the Stimulus required.

We are next to conſider, what gives a greater Force to the Bowels, to enable them to make good Chyle, and propel it into the Lacteals; which is to be done by ſtrengthening the Rigidity of their Fibres. Theſe are in general Aſtringents: as, in the firſt Place, Steel, which to be ſerviceable, muſt be adminiſtered in ſuch a Form, as not to mix with the Blood, but to act on the Solids only. It's Uſe is therefore more neceſſary and profitable where a due Rigidity of the Bowels is wanting, and there is an Abundance of Pituitæ; and particularly if an Acid abounds; then it may be taken in Subſtance, or Fileings; but if a ſluggiſh and not acid Mucus predominates, the Steel ſhould be given in Rheniſh Wine, or Vinegar.

And ſecondly, for this Intention the Peruvian Bark is a very powerful Remedy, and claims the next Place to Steel: thirdly, Rhubarb: fourthly, the Tamariſk Bark; and indeed for this Intention, the moſt powerful Aſtringents in a proper Degree, may become Emmenagogues, being adminiſtered to correct, or carry off that Species of Humour, which chiefly prevails in the firſt Paſſages.

If an Acid predominates, it may be known by an Appetite to improper and unuſual Things; ſower Eructations, Gripes, with a Senſation of Cold, &c. in which Caſe, Steel may be blended with Extract of Bark and Rhubarb: but Steel

where

where no Acid abounds generally excites Anguiſhes, Vomitings, Gripes, and Diarrhæas; for not being diſſolved, it acts only as a Stimulus; therefore in ſuch Caſes it would be more advantageouſly adminiſtered with the Cortex, infuſed in any ſubacid Wine. To this Claſs alſo, belong thoſe warm and ſtimulating Aromatics, which afford a great deal of acrid Oil by Diſtillation; as Savin, Rue, Roſemary, Pennyroyal, Marjoram, Feverfew, and the like.

The ſecond Kind of Medicines cauſing a Plethora, are thoſe which increaſe the blood-making Power, in the Heart and Blood Veſſels; which Power, is in fact, no other, than the oſcillatory Forces of the Veſſels; which will be naturally encreaſed, by promoting the Power of Chylification, which is effected by cleanſing the firſt Paſſages, and ſtrengthening the digeſtive Faculties. Air and Exerciſe muſt however co-operate with Medicine in this Intention. The third Kind of the ſaid Medicines, includes thoſe which hinder the too great Conſumption of the collected Blood; therefore, a too copious Perſpiration is to be avoided.

The ſecond Claſs of Emmenagogues, contains thoſe which determine the plethoric Blood to the Womb: and ſuch are, all that diminiſh the Reſiſtance in the uterine Veſſels, and at the ſame Time increaſe it in the others; the Reſiſtance in the uterine Veſſels is diminiſhed two Ways: firſt, by relaxing thoſe Veſſels; ſecondly, by accellerating the Reflux of the Blood from the lower Veins towards the Heart. This Claſs of Medicines may therefore, be divided into

into two Kinds; firſt, thoſe which relax the uterine Veſſels; as a warm Bath as high as the Navel; or, any external Heat applied to the lower Parts; or, Ointments which conſiſt of fat, oily, and ſaline Aromatics, applied to the Feet, Legs, or Groins; or, relaxing and warming Plaiſters prepared of the fœtid Gums; which relax the Veſſels, and at the ſame Time, reſtrain the perſpirable Humours, and excite a greater Heat under the Form of a continual Bath: ſecondly, thoſe which accellerate the reflux of the Blood; which indeed is only to be effected by Friction or Exerciſe, as rubbing the Feet, Legs, and Thighs, for half an Hour, every Morning and Evening with a Fleſh-bruſh, or warm Cloth: moderate Walking, Riding, or Dancing. Therefore in this Caſe, Exerciſe is Medicine, and promotes the Reflux of the Menſes, by removing the Reſiſtance in the Veins: for when this is removed, the Blood flows in a greater Quantity to thoſe Parts; whence there is a greater Preſſure of the Blood into the lateral Veſſels, and hence follows the Excretion of it. The third Claſs of Emmenagogues therefore, or thoſe which diſpoſe the uterine Veſſels to this Excretion, includes only the ſame Kind of Baths, Fomentations, and Exerciſe, above recited, more powerfully, and frequently exerted.

Hence it appears, that Ariſtolochics, are Uterines of the third Claſs; for there a Plethora is ſuppoſed to be already preſent, and alſo a Determination to the Womb otherwiſe, there is no Occaſion to move the Lochiæ. Ecbolics, are only the more powerful Medicines of the ſame

ſame Claſs; which might perhaps, be ſtrengthened by the Addition of Sternutatories. Abortives, are thoſe which open the Womb, and expel the Fœtus and Placenta; as firſt, too great a Quantity of Blood; ſecondly, all that determine ſtrongly to; and thirdly, all which powerfully conſtringe the Womb.

Opium, in many uterine Caſes, particularly the Pains ariſing from the Contraction of the Uterus after Delivery, is a Medicine of great Power and Efficacy. According to *Mead*, the Virtues of Opium are owing to a volatile alkaline Salt, intimately mixed and combined, with an oily, ſulphureous Subſtance: the Effects of which are to be conſidered; firſt upon the Stomach; and then upon the arterial Fluid itſelf, after it has paſſed the Primæ-viæ.

An agreeable Senſation in the Stomach, and a moderate Diſtenſion of its Membranes, is an Excitement to Sleep; the one of theſe engages the Mind, the other acts on the Body: for a pleaſing Senſation, inclines the Mind to Reſt, by diverting its Attention from external Objects; and the fullneſs of the Veſſels in the Brain, in ſome meaſure, impedes the Derivation of the nervous Juices into the Organs, &c. Opium ſupplies all thoſe agreeable Senſations, which are obſerved to follow upon that grateful Senſe in the Stomach, ariſing from a moderate Fullneſs. No Bodies being ſo fit and able, to affect our ſenſile Membranes pleaſingly, as thoſe which conſiſt of volatile Parts, the Activity of which are tempered and allayed, by the Smoothneſs of ſome lubricating and oily Particles; which

which by lightly rarefying the Juices of the Stomach, and cauſing a pleaſing Tittilation of its nervous Coat, enduces an agreeable Plenitude, and entertains the Mind with Ideas of Satisfaction and Delight. Hence the Mechaniſm whereon the other Virtues of Opium in eaſing Pains, checking immoderate Evacuations, &c. depend, are eaſily explained: for the Mind being taken up with a pleaſing Senſe, is diverted from a diſagreeable one; and all Pain being attended with a Contraction of the Part, that Relaxation of the Fibres which it cauſes, eludes and deſtroys the Force of the Stimulus. And as in all immoderate Secretions, there is alſo moſt commonly, an Irritation of the Organs, the Removal of that Irritation, will in like Manner, abate the Diſcharge.

Theſe Effects will all be heighthened by the Mixture of the Opiate Particles on the Blood; which being rarefied, diſtend it's Veſſels, particularly thoſe of the Brain; which alſo, ſtill in a greater Degree, leſſens the Influx of the nervous Fluid to the Parts, by compreſſing the little Tubuli, or Canals through which it is derived. Thus Opiates act, by relaxing the Fibres, and heating and rarefying the Fluids; and by this ſame Property, whereby they take off Cramps in the Nerves, they may relieve Excretions depending upon them; and will very often happily promote the natural Diſcharges, when they are unſeaſonably interrupted by violent Contractions. Thus Opiates in nephritic Pains, move the Urine ſtoped by Gravel and Stone; and in uterine Caſes, aſſiſt Nature, in propelling the Menſes, the Fœtus, and the Lochiæ.

MUSK,

Musk, though not ſo powerful a narcotic, acts on nearly the ſame Principles; and if given in ſufficient Doſes, will procure Sleep as well as Opium: it relaxes the Solids, and expands and attenuates the Fluids making them conſequently more fit for Circulation, in the minuter Veſſels. Muſk and other Perfumes of the ſame Tribe, have been long celebrated as excellent Antiſpaſmodics; but are uſually ordered in too ſmall Quantities to anſwer the Intention. The Chineſe who are much better acquainted than us, with the Nature and Uſe of this excellent Drug, adminiſter it in much larger Quantities; the uſual Doſe among them, being the tenth Part of an Ounce.

Antiſpaſmodics, are Remedies of the moſt extenſive Uſe; and Muſk is one of the moſt powerful Drugs of this Claſs: the ſubſultus Tendinum; the convulſive Hiccough; the Hyſteric Commotions, and the Fits of Children, may often be cured by it: but like the Bark, it requires a given Quantity to be taken in a given Time. It is not to be imagined however, that where the Spaſm proceeds from any Stimulus fixed in a certain Part, that this, or any other Medicine, can abſolutely cure the Convulſion, if the Cauſe is not removed; yet it will in ſuch caſes generally alleviate the Symptoms, and given Time for other Medicines.

To produce any material Effect, it ſhould be adminiſtered to ten Grains, or upwards, at a Doſe; and never fails to produce a mild Diaphoreſis without heating, or giving the Patient any uneaſineſs; after the ſweat breaks out, the Patient

tient commonly falls into a ſweet refreſhing Sleep. And when thus taken though the ſweat it procures is very copious, and ſeldom goes off under thirty or forty Hours; it gives not much Fatigue, as it procures an eaſy Sleep, and at the ſame Time, recruits the Spirits.

In theſe Reſpects, the Operation of Muſk, much reſembles that of Opium; but is in this much preferable, that it leaves not behind it any Stupor, which the latter often does; it is therefore likely to anſwer, in thoſe low Caſes, where Sleep is much wanted, and Opiates are improper. It is beſt always to give it in a Bolus, as in that Form, the Perfume is not near ſo ſtrong as in any other: indeed when given in a large Quantity, it is rather Fœtid than Fragrant; and there are few hyſterical Perſons, how averſe ſoever to Perfumes, but may take it in that Form without Inconvenience.

PHARMA-

Pharmacopœia Obſtetricaria.

Balſam. Corroborans.

℞ Balſ. Traumat.
Guaicin. aa. ʒiij.
Elix. Vit. dul. ʒij. M.

This is a valuable and ſucceſsful Remedy for the Fluor Albus and other Weakneſſes. Doſe, a Tea-Spoonful twice a Day, in a little Brandy, rich Wine, or the Emulſion hereafter mentioned.

Balſ. Corroborans alterum.

℞ Balſ. Guaicin. ʒij.
Elix. Antiven. Quin. ʒvj. M.

For the ſame Purpoſes, and to be taken in the ſame Manner.

Bolus Anodynus.

℞ Conf. Damocrat. ℈i.
Ext. Theb. gr. ß. ad gr. iß. M.

Or,

℞ Pil. Saponacei, vel Pil Mathei, gr. x.

Or,

℞ Pil. e. Styrace, qt. vj.
Spec. Aromat. gr. iv.
Syr. ſimp. q. s. m.

To procure Sleep, or mitigate the ſpurious Pains, reſembling thoſe of Labour; or to aſſiſt the Relaxation of the Os Uteri.

Bolus Aperitivus.

℞ Rhei. pulv. ℈j.
Jallapii gr. ij. ad ℈ſs.
Syr. Zinzib. q. s. M.

To procure a gentle Stool or two, when Manna, or Linitive Electary would be too cold.

Bolus Aſtringens.

℞ Rhei pulv.

Philon. Lond. aa. ℈j. Syr. e. Cort. aur. q. s. M.

For the Teneſmus and Cholic Pains, with a ſlight purging.

Or,

℞ Rhei Torrifacti. ℈ſs.

Opii colati gr. i. Syr. Zinzib. q. s. M.

When the Pains are very troubleſome, and the Stools thin and frequent; theſe muſt be aſſiſted by an aſtringent Mixture, and the Hartſhorn Drink; or if the Teneſmus is very troubleſome, a grain, or two of Ipecacuanha, may be added to either of theſe Boluſſes.

Bolus Balſamicus.

℞ Sperm. Ceti pulv. ℈j.

Conf. Alkermes q. s. M.

To be taken after Delivery, and repeated every four or five Hours, with a Draught of ſimple Pennyroyal Water, ſweetened with Syrrup of Marſhmallows; or white Caudle: or where the After-pains are troubleſome, a Draught (or about four Spoonsful) of the Anodyne, or Hyſteric Mixture, hereafter mentioned.

Bolus Cardiacus.

℞ Pulv. Contray. c. ℈j.

Conf. Cardiaca q. s. m.

To be taken every four or ſix Hours, to promote Perſpiration, and to raiſe the Pulſe and Spirits.

Bolus Emmenagogus.

℞ Pulv. e. Myrrh. c. gr. xvi.

Rad. Valer. Sylv. gr. v. Syr. ex. Alth. q. s. M.

To be taken twice a Day, or oftner, to promote the Menſes at their Period, or the Evacuations after Delivery, with a Cupful of Spermaceti Emulſion. A Grain of Opium may be added to

to the firſt Bolus, if the Patient is in Pain, and repeated occaſionally in ſmall Doſes.

Bolus Hyſtericus.

℞ Gu. Aſs. Fœtid. ℈ſs.
Caſtor. ruſ. p. gr. vj.
Camphor. gr. iv. Mell. Ang. q. s. M.

To be taken with a proper Julap, between the Fits, once in ſix or eight Hours.

Bolus Moſchatus.

℞ Moſch. orient. pur. gr. xij. ad ℈j.
Cinnab. nativ. gr. x. ad ℈j.
Syr. e. Cort. aur. q. s.

To relieve any Convulſive, Epileptic, or Hyſteric Spaſms: to be once or twice repeated at the Diſtance of two or three Hours. This is deemed excellent in an Hydrophobia.

Bolus Sudorificus.

℞ Pulv. Cont. c. gr. xiv.
Calx. Antimon. loti, gr. iv.
Syr. Simp. q. s. m.

To promote a copious Diaphoreſis, or throw out an Eruption on the Skin; once in ſix Hours, with proper Drinks.

Or,

℞ Ther. Androm. ʒſs. ad ℈ij. ft. Bolus.

To be diſſolved and taken in any warm Drink, once in ſix or eight Hours, or the Conf. Damocrat. may be uſed in the ſame Manner.

Cataplaſma Emolliens

℞ Flor. Sambuci.
Mica Panis. aa. p. œ.

Coque in lactis Vaccin recent. q. s. fiat. Cataplaſma, cui add. ungt. e. florib. Sambuci. q. s. dein Miſce.

For the Tumors in the Breaſts, Inflammations and Tumefactions of the external Parts from Lacerations, or other Cauſes.

Decoctum

Decoctum Aperitivum.

℞ Sem. Carui
Corriandri aa. ʒij.
Cardamom. ʒj.

Contunde et coque in aq. font. ℔ijſs. ad. ℔ij. deinde ad. Manna.

Sal. Cathart. amar. aa. ʒj. quibus ſoluti, liquore Colatur.

Doſe, a Quarter of a Pint, in the Morning made warm, to cool and open the Body; or for a regular Purge, the quart taken by ſmall Draughts at proper Intervals.

Decoctum Diureticum.

℞ Rad. Alth. Inciſs.
Petroſelin. Inciſs. aa. ʒj.

Glycirrhis. ʒſs. affunde Aq. Bul. ℔ij. et paulatim Coque, dein Cola.

Doſe, a Tea-cupful now and then made warm, in any Complaints of the Bladder or Kidneys, or in the Gonnorrhæa: a few Grains of powdered Nitre, or a few Drops of Spt. Nitri. dul. may be occaſionally added to each Doſe; or an Ounce of Gum Arabic may be diſſolved in the whole.

Decoctum Pectorale.

℞ Hordei perlati vel Gallici. ʒij. quod lava et paululum coque in aq. font. ℔ſs.

Hordei ut ſupra depurati iterumque coque in Aq. font. ℔iij. cui addatur, Paſſuli Solis, ʒiv. Rad. Glycirrhis. ʒj. Rad. Eryng. Cond. ʒij. quibus ad Collatura ℔ij. coctis Liquor coletur.

Half a Pint to be taken warm twice a Day, or oftener for a Cough, or ſevere Cold in hectic Habits: a few Hartſhorn Shavings may be ſubſtituted for the Liquorice, or added to the whole, and a little new Milk put to every Doſe when warmed; which is what is generally called Sham-Aſſes Milk.

Decoctum

Decoctum Stypticum.

℞ Cort. Peruv. Craſs. pulv. ℥ij.
Gu. Myrrh. Contus. ℥j. Coque in Aq. font. ℔iij. add ℔ij. Cola.

Doſe, from two to four Ounces every two or four Hours, in immoderate Evacuations of the Menſes, or ſecond Lochiæ; in the Fluor Albus, Diſcharges from Uterine Ulcers, or Cancerous Tumors, and in all Fevers tending to Putrefaction. Caſcarilla may be uſed inſtead of Myrrh.

Or,

℞ Raſſur Ligni Campechenſe ℥iiiſs.
Cort. Aur. Hyſpal. ℥ſs. Coque in Aq. font. ℔iij. add ℔ij. et Cola.

A Tea Cupful to be taken frequently, for Floodings, Bloody Flux, and all Hœmorrhages.

Electarium Aperitivum.

℞ Elect. Linitiv. ℥iſs.
Pulv. e. ſenn. c. ℥ſs.
Syr. Roſar. ſolut. q. s. m. ft. Elect.

The Quantity of a Nutmeg to be taken at Bed-time, two or three Times a Week. To this may be added, Lacc. Sulphur. ℥j. which makes a good Remedy for the Piles.

Electarium Corroborans.

℞ Conſ. Roſar. rub.
Cort. aur.
Cort. Peruv. pulv. aa. ℥ſs.
N. M. p.
Cinnam. p. aa. ʒij.
Syr. e. Cort. aur. q. s. m. ft. Elect.

The Quantity of a Nutmeg three Times a Day, with a Tea Cupful of Tincture of Roſes, to prevent Abortion.

Elect. Corrob. Alter.

℞ Conſ. Cort aur.
Conf. Fracaſt. s. m. aa. ℥j.
Rad. Caſcarill. pulv. ʒvj.
Gu. Oliban. p. ʒij.
Syr. Roſar. q. s. m. ft. Elect.

To

To be taken as the former; for the Fluor Albus, and other Weakneſſes.

Emplaſtrum Hyſtericum.

℞ Gu. Galban. ℥ij.
Caſtor. Ruſs. pulv. ʒij.
Opii Colati ʒj.
Ol. Succin. rect. gtſs.
Rutæ. Chym. ℥ſs. m. ft. Emp.

To be ſpread on Leather, and applied to the Abdomen after Delivery, when the Pains are violent, or to the Temples for the Clavus Hyſtericus.

Emp. Roborans.

℞ Sac. Saturni. ʒj.
Gu. Oliban. ʒij.
Emp. Comune ℥ij. M.

To be ſpread on Leather, and applied to the Loins for the Fluor Albus, or other Weakneſſes after Delivery.

Emulſio. Corroborans.

℞ Sumit. fol. Hyperici. M. j. Infund. in Aq. bulient. q. s. ad Colatura ℥vj. cui ad.
Aq. N. M. ℥iſs.
Syr. Balſam. ℥ſs.
Vitel. ov. recent. No. j. M.

A proper Vehicle for the Balſams recommended in the Fluor Albus.

Emulſio Oleoſa.

℞ Aq. Hyſop. ℥vj.
Nuc. Moſchat. ℥j.
Ol. Amygd. dul. ℥ij.
Spt. ſal. arm. v. gut. xxx. vel. q. s.
Elix. Aſhtmat. Quincei.
Syr. Balſam. aa. ℥ſs. M. ft. Em.

For Coughs, Hoarſneſs, or Pain in the Side, a Tea Cupful, three or four Times a Day.

Emulſio e Sperm. ceti.

℞ Sperm. cet. vit. ov. ſolut. ℥ſs.
Aq. Puleg. ſimp. ℥vj.
——— Spirit.

Elix.

Elix. Aſthmat. Q. ua. ʒvj.
Syr. ex. Alth. ʒſs. M. ft. Emul.

A Tea Cupful to be taken once in four or ſix Hours after Delivery, with or without the Anodyne, or Emmenagogue Bolus, before mentioned: or to this may occaſionally be added a few Grains of Nitre, or pulv. Cont. c. or a little Spt. Nitri dul.

Enema Commune.

℞ Sapo. moll. com. ʒſs.
Sal. Com. ʒj. ſolve in Aq. font. tepefact. ʒx. cui adde.
Aq. Aniſi. Com. Spt.
Ol. Lini. aa. ʒij. M.

Enema Carminativa.

℞ Flor. Chamom.
Bacc. Juniperi.
Semi. Carui.
Aniſi aa. ʒſs.
Coque in aq. font. q. ſ. ad. Collatura ʒx. cui adde Ol. Olivar. ʒiv.

For Flatulencies, or Pains in the Bowels, or to promote the ſuppreſſed Diſcharges.

Enema Purgans.

Enemati ſupradicto addantur,
Sal. Cathart. amar.
Syr. e. ſpin. cervin. aa. ʒj.
Tinct. Senn. ʒij. M. ft. Enem.

To Evacuate the Fœces in very coſtive Habits.

Enema Purgans p. Infant.

℞ Lac. Vaccin. recent. ʒiv.
Syr. Roſar. Solut.
Ol. Olivar. aa. ʒj.
Aniſi. gutt. x. M.

Moſt of the Diſeaſes of Infants ariſing from Crudities and Indigeſtion, Glyſters will often do more for them, than Medicines in any other Form: Broth of Chiken's Guts, with a few warm Seeds and a Sprig of Rue, will relieve them in many

many convulſive Spaſms from that Cauſe; and in the Dyſenteries of Children, (commonly called the watery Gripes) Glyſters of Starch or Wafer-paper, with a ſmall Quantity of Conf. Fracaſt. will ſometimes effect a Cure. In Intermittents, where we cannot give the Cortex, in any other Form, it will produce a very good Effect, by way of Glyſter.

Embrocatio Repellens.

℞ Spt. Vinos. Gallic.
Acet. Acerim.
Ol. Olivar. Com. aa. p. æ. M.

Or,

℞ Spt. vinos. rect. ℥iv.
Tinct. Myrrh. ℥ſs.
Camph. ℥iſs. M.

To repel the Milk in ſuch Women as do not give Suck, which ſhould be applied on that Occaſion as ſoon as poſſible, after Delivery: when the Breaſts are turgid and full of Milk, ſpiritous Embrocations are improper; in ſuch Caſes, common Linſeed Oil, is a very good Application, but has a diſagreable Smell, and ſpoils any Linnen it touches.

Guttæ Cordiales.

℞ Spt. Lav. c. ℥ſs.
Volat. Aromat.
Tinct. Caſtor. aa. ℥ij. M.

A Tea Spoonful to be taken occaſionally in any Vehicle, for the common Nauſeas or Faintings.

Guttæ Carminativæ.

℞ Tinct. ſem. Cardamom. ℥vj.
Aromat. ℥ij. M.

For Wind, or Coldneſs in the Stomach, to be taken as the former.

Guttæ Diureticæ.

℞ Spt. Nitri. dul. ℥vj.
Lavend. c. ℥ij. M.

For

For Suppreſſion of Urine, Gravel, &c. a Tea Spoonful now and then, in a little warm Water, or the diuretic Decoction.

Guttæ Emmenagogæ.

℞ Tinct. Mellampod. ʒvj.
Elix. Myrrh. c. ʒij. M.

For Suppreſſions of the Uterine Diſcharges; a Tea Spoonful two or three Times a Day in warm Pennyroyal Water.

Guttæ Hyſtericæ.

℞ Spt. volat. fœtid. q. v.
Or,
℞ Tinct. rad. valer. Sylv. ſimp. q. v.
Or,
℞ Tinct. rad. valer. Sylv. vol. ʒvj.
Caſtorei ʒij. M.

To ſmell to, or to be taken in Hyſteric Fits, or between the Spaſms, a Tea Spoonful in Wine and Water now and then.

Guttæ Nervoſæ.

℞ Tinct. Caſtor. rus.
Spt. Lav. c. aa. ʒiij.
Tinct. fœtid. ʒij. M.

For the Head-ach, &c. a Tea Spoonful now and then in any Vehicle.

Guttæ Stomachicæ.

℞ Tinct. Amar. (Pharm. Lond.)
Serpentaria. aa. ʒſs. M.

To ſtrengthen the Appetite and Digeſtion; a Tea Spoonful twice a Day in Spring Water.

Guttæ. Stypticæ.

℞ Tinct. Cort. Peruv. (Huxhami) ʒvij.
Elix. vitrioli. acid. ʒj. M.

For a ſlight Flooding, or immoderate menſtrual Evacuation, or general Relaxation after Fevers; a Tea Spoonful twice a Day, in Tincture of Roſes, or red Wine and Water.

Infuſum Amarum.

℞ Rad. Gentian.
Cort. aurantior. hyſpal.
Sumitat. Abſynth. mar. aa. ʒſs.
Sem. Cardamomi.
Corriandri. aa. ʒij. Infund. in Aq. font. bulient. q. s. ad. Colat. ℥xiv. cui adr. Aq. Cort. aur. ſpt. ʒij.

To help the Digeſtion, and recover the loſt Appetite; a Tea Cupful twice a Day.

Infuſum Antiſpaſmodicum pro Infantibus.

℞ Fol. Rutæ. ʒj.
Caſtor. Ruſs. ʒſs.
Rhei. inciſſi. ℈j. affunde Aq. menth. pip. bulient. q. s. ad Colatura ʒij. cui adde Syr. ſimp. ʒſs
Aq. Nuc. Moſch. ʒij.
Tinct. Fuligin. gutt. xx. vel. ſupra. M.

For Convulſive, or Epileptic Spaſms in Children; a Pap Spoonful now and then.

Infuſum Chalybeatum.

℞ Vini Rhenani ℔ij.
Chalyb. trit. ʒij.
Cort. Peruv. ʒj. leni Calore macerenter, per hores, 24.

To ſtrengthen the Habit in the Chloroſis, &c. after the Uſe of Emmenagogues of the firſt and ſecond Claſs, where there is no predominant Acid, as in ſuch Caſes Steel in Subſtance is not proper; Doſe a Tea Cupful two or three Times a Day, at a proper Diſtance before Meals.

Infuſum Emmenagogum.

℞ Raſura rad. Raphani ruſt. rec. ʒſs.
Flav. Cort. aur. hyſp. ʒj. affunde, Aq. font. bulient. ℥iv. et cum refrixerent cola.

To be taken twice a Day, for the Chloroſis, or menſtrual Obſtructions.

Infuſum Purgans.

℞ Fol. Senn. ʒſs.
Sem. Cardamom. ʒj. ft. Infuſio in Aq. pip. Jamaic.

Jamaic. bulient. ℔ ſs. Colatura adde Spt. Lavend. c. ʒiij. M.

To be uſed in Coſtive Habits, a Table Spoonful or two, Night or Morning.

Julep Cordiale.

℞ Aq. Cort. aur. Simp. ʒvj.
N. Moſchat. ʒiſs.
Spt. Lav. c. ʒij.
Conf. Alkermes. ʒſs. M.

For the ſlight Nauſea and Faintings during Pregnancy; a Tea Cupful now and then.

Julep. Carminativum.

℞ Aq. ſem. Anethi. ʒvj.
——— Carui. ʒiſs.
Syr. Zinzib. ʒſs.
Spt. Lav. c. ʒij. M.

For a Coldneſs or Pain in the Stomach; asth former.

Julep. Hyſtericum.

℞ Aq. menth. pip. ſimp.
Caſtorei Ruſs. aa. ʒiij.
Cort. aur. ſpt. ʒj.
Tinct. Valer. ſylv. s. ʒſs.
Spt. Nit. dul. ʒj.
Syr. Roſar. ſolut. ʒſs. M. ft. Jul.

To palliate the Symptoms and prevent the return of the Fit; a Tea Cupful now and then by itſelf, or after the Muſk or fœtid Bolus.

Julep. Infantile.

℞ Aq. ſem. Anethi. ʒiij.
Nuc. Moſch.
Syr. ſimp. aa. ʒſs. M.

A proper Vehicle for adminiſtering the Teſtaceous or Cathartic powders; the Anodyne, Cordial, or Antiſpaſmodic Drops; ſuch as, Elix. Aſthmat. and Æther, in the Hooping Cough: Tincture of Saffron, in Eruptive Fevers: or any Carminative Tincture or Oils, in Gripes and Flatulenceis: Tinct. Fuligin. in Fits, &c. Teſtaceous

ceous Powders, Magneſia, or Rhubarb may occaſionally be added.

Linimentum Sanans.

℞ Ung. e. flor. Sambuc.
e. Sperm. Ceti. aa. ℥ſs.
Ol. Hyperici. ℥ſs.
Ovi unius vitell. M.

For Lacerations or Excoriations; applied upon Pledgets cloſe to the Parts; or a Piece of fine Rag dipt in this Liniment, may be introduced into the Vagina when the Os Internum is ſuppoſed to be injured.

Liniment. Volatile.

℞ Lin. vol. (P. L.) ℥ij.
Spt. Roriſmar. ℥j.
Eſſent. Limon.
Ol. Succin. rect. aa. ʒj. M.

For hard Tumours, in the Breaſts or elſewhere; Inflamations, or ſettled Pains.

Lin. ad. Papillas.

℞ Sevi. ovilli. Curati
Ol. amygd. dul. aa. ℥j.
Sach. Liſbon. ʒij. addr. ad. libit. Gu. Myrrh. (in. vit. ov. ſolut.) ʒij. M.

For Chops and Excoriations of the Nipples, chiefly for Women who do not give Suck. For thoſe where unctuous Applications are not ſo proper, Sach. Saturni ℈ij. in aq. Roſar. ℥ij. ſolut. is preferable.

Miſtura Anodyna.

℞ Aq. Roſar. ℥ij.
Cort. aur. ſpt. ʒvj.
Syr. e. mecon. ʒij.
Tinct. Thebaic. gutt. 20. ad. 60. M.

For two or three Doſes to be taken at Bed-time in Caſe of Watchfulneſs; or when the dilating Pains are more fatiguing, than profitable in the Beginning of Labour.

Miſt.

Miſt. Anodyn. Infantilis.

℞ Aq. ſem. Anethi. ℥ij.
Syr. e. mecon. ℥j. M.

A Pap Spoonful now and then, but to be uſed ſparingly, and only when Sleep cannot be obtained without it.

Miſtura Aſtringens.

℞ Aq. Cin. ten. ℥iv.
Spirt. ℥iſs.
Syr. Cydonior. ℥ſs.
Spec. e. Scord. ſ. o. ʒj. M.

For the Diarrhæa during Pregnancy, three Spoonsful after every looſe Stool, the Rhubarb Bolus premiſed.

Miſtura Aſtring. Infantilis.

℞ Aq. Cin. ten. ℥iij.
Nuc moſch. ʒiij.
Syr. e. mecon. ℥ſs.
Spec. e. ſcord. s. o. ℈ij.
Gu. Arab. pulv. ℈j. M.

Or,

℞ Aq. Cin. ten. ℥iij.
Tinct. Terr. Japon.
Syr. Cydonior. aa. ʒiij. M.

A Pap Spoonful after every looſe Stool.

Miſtura Aperiens.

℞ Aq. menth. ſimp. ℥iv.
Tinct. Senn.
Syr. Roſar. ſol. aa. ℥ij.
Spt. Lav. c. ʒij, M.

For Coſtiveneſs during Pregnancy, a Tea Cupful occaſionally.

Miſt. Aperit. Infantilis.

℞ Aq. ſem. Anethi. ℥j.
Syr. Roſar. ſolut.
Ol. Amygd. d. aa. ℥ſs. M.

To purge off the Meconium, a Pap Spoonful now and then; the Caſtor-Oil is an admirable Medicine for this Intention, when it can be had.

Miſt.

Miſt. Antiſpaſmodica Infantilis.

℞ Infus. fol. Rutæ ℥iij.
Syr. Rhabarb. ℥ſs.
Tinct. R. Val. s. s. ʒij.
Fuligin. gut. 30. M.

For Fits; a Pap Spoonful now and then; to this may be occaſionally added, 10 or 15 Grains of Muſk.

Miſtura Cardiaca.

℞ Aq. Puleg. ſimp. ℥iijſs.
Cort. aur. Spt. ʒvj.
Syr. e. Cort. aur. ℥ſs.
Conf. Cardiaca ʒij. ad. ʒiv. Adr. pro re nata Tinct. Theb. gutt. xx. vel. ſupra.

To be taken at two or three Periods, when the Pains are languid, and the Woman begins to ſink.

Miſtura Febrifuga.

℞ Aq. Alexit. ſimp. ℥vj.
Spirt. ℥iſs.
Syr. Caryoph. ℥ſs.
Conf. Damocrat.
Pulv. contray. c. aa. ʒiſs M.

For the Milk-Fever when high, four Spoonsful every four or ſix Hours.

Miſtura Hyſterica.

℞ Aq. Puleg. ſimp. ℥vj.
Cort. aur. Spt. ℥iſs.
Syr. Croci ℥ſs.
Pulv. rad. valer. ſylv. ʒij.
Tinct. Caſtor.
Spt. Lav. c. aa. ʒij. M.

For Faintings, and other Nervous and Hyſteric Affections, a Tea Cupful now and then.

Miſtura Hyſterica altera.

℞ Aq. Puleg. ſimp.
Rutæ. aa. ℥iij.
Bryon. c. ℥ſs.
Syr. e. mecon. ℥ſs.

Tinct.

Tinct. Caſtor. ʒiij.
Croci.
Thebaic. aa. ʒj. M.

This is a Medicine of great Efficacy in mitigating the after Pains. When the Rue-water is not to be had, a few Drops of the Chymical Oil of that Plant rub'd on a Bit of Sugar, may be ſubſtituted for it; four or five large Spoonsful to be taken immediately after Delivery; and three Spoonsful every three Hours, till the Pains abate.

Miſtura Nephritica.

℞ Aq. Petroſelin. ʒvj.
Nuc. moſc. ʒiſs.
Syr. ex. Alth. ʒſs.
Spt. Nitri. dul. ʒij. M.

For Suppreſſions of Urine, Gravel, &c. a Tea Cupful now and then.

Miſtura Purgans.

℞ Infus. Senn. ʒiv.
Tinct. Senn.
Syr. e. ſpin. cerv. aa. ʒij.
Spt. Lav. c. ʒij. M.

In robuſt and coſtive Habits, a ſmall Cupful occaſionally.

Miſtura Salina.

℞ Sal. abſynth. ℈iv.
Succ. Limon. (rec. Expreſs.) ʒij.
Aq. Cinnam. ten ʒiv.
Nuc. Moſch. ʒiſs.
Syr. Croci. ʒſs.

For the Nauſea and febrile Heats during Pregnancy; a Tea Cupful every four or ſix Hours. To this may be added a proper Quantity of Conf. Damocrat. Ther. Androm. Nitre, Contrayerva, Gaſcoign's Powder, or Magneſia; or in coſtive Habits, a little Rhubarb. Either of theſe Mixtures, or the Julaps and Emulſions before mentioned, may be occaſionally divided into four Draughts.

Pill.

Pill. Anodynæ.

℞ Pil. e. Styrace gr. vj. ft. pil.

Or,

℞ Pil. ſaponaccei. gr. xft. pil. ij.

Either of theſe contain one Grain of Opium; and may be given at the Beginning of Labour; or a ſingle Pill of the latter may be given occaſionally towards the latter End of Pregnancy; or half a Grain, or a Grain of Opium may be uſed in their ſtead.

Pil. Coroborantes.

℞ Gum. Olibani. ʒij.
Ren. Flav. ʒj.
Tereb. venet. q. s. ft. pil. xxx.

Three Pills to be taken twice, or three Times a Day, for Pains in the Loins, or in any Weakneſſes; a few Grains of Opium may be added to Advantage, or Pills of Terreb. e. Chio. may be ſubſtituted.

Pil. Emmenagogœ.

℞ Gu. Ammon.
Galban.
Sagapæn.
Myrrh. aa. ℈j.
Ol. Sabinæ. q. s. ft. pil.

Or,

℞ Sapon. venet. ʒiv.
Bulb. recent. Ari ʒj.
Aſs. Fætid. ʒſs. M. ft. pilulœ ex ſing. gr. iij. ſingulis bihoris unum Sumatur.

Theſe will agree whenever the Entrance of the Chyle is obſtructed by a viſcid Phlegm, as happens in Chlorotic, Hyſteric, and Hypochondriac Patients, which Phlegm, or Mucus, they attenuate, or diſſolve; therefore, are good for ſuch Women whoſe Menſes are deficient for want of the requiſite Plethora to purge off the diſolved Pituitæ, the following may be uſed.

Pil.

Pil. Emmen. Cath.

℞ Aloes. opt. ʒj.
Reſin. Jallap. gr. xv.
Colocynth. (pro Stimulo) gr. v. Syr. ſimp. q. s. M. ft. pilula ex ſing. gr. iij.

About four or ſix, will be a proper Doſe, to be taken in the Morning, and the Patient ſhould lie in Bed an Hour after.

Pil. Emmen. altera.

℞ Pil. Ecphract. (P. L.) ʒij.
Ruffi. ʒj. M. ft. pil. 30.

Capt. iv. ſemel vel bis de die cum Guttis hujus ſpec. ſupra dictis.

After the Uſe of the above, where an Acid abounds, the following may be ſerviceable to ſtrengthen the Bowels, and promote Chylification.

Pil. Emmen. Reſtorantes.

℞ Limatur. Ferri (opt. Levigat) ʒij.
Ext. Rhab. ʒj.
Pulv. Cort. peruv. ʒſs. Cons. vel. Syr. e. Cort. aur. q. s. M. ft. pil. ex. ſing. gr. v. Pilula omnibus bihoris ſumendus.

Pil. Fœtid.

℞ Gumi. Aſs. Fœtid. ʒij.
Pil. Aromat. (P. L.) ʒj. M. ft. pil. xxx. tres vel quatuor bis die ſumend. cum Julep. Milt. vel Guttis, Hyſt. ſupra dictis.

For obſtinate Head-Achs, Hyſteric Fits, Convulſions, Obſtructions, &c.

Potio Purgans.

℞ Aq. pip. Jamaicienſis. ℥j.
Syr. e. ſpin. cervin.
Tinct. Senn. aa. ℥ſs.
Pulv. Jallap. ℈j. M. ft. hauſt.

A warm ſmart Purge for a healthy Woman at the End of the Month who does not give Suck; it will ſeldom be neceſſary to purge thoſe that do. By ſubſtituting, Syr. Roſar. for e. Spin. and Rhu-

barb for the Jall. you have a mild Purge for weak Bowels.

Potio Purgans alter.

℞ Infus. Senn. ℥ij.
Sal. Glaub.
Syr. e. ſpin. cerv.
Tinct. Senn. aa. ℥ſs.
Spt. Lav. c. ʒj. M.

Pulv. Abſorbens Infantilis.

℞ Chel. canc. ppt. ℥ſs.
Corral. rub. ppt.
Teſt. Oſtrear. ppt. aa. ʒij.
Ol. N. M. gutt. vj. M.

Eight or ten Grains of this Powder may be given once or twice a Day in their Victuals, to correct the acid Crudities in the Stomach of Infants; the ſame Quantity of Magneſia, or two or three Grains of Rhubarb with a Doſe of the above Powder, may be given to purge them off.

Pulv. ad. Dyſenteriam Infantilem.

℞ Corral. rub. ppt.
Amyli.
Gu. Arab. pulv. aa. ϑj.
Rhei. torr.
Nuc. Moſchat. torr. aa. gr. xij. M. ft. pulv. iij. quar. ter de die capt. unum.

In violent and conſtant Strainings, a Grain of Ipecacuanha may be added to one or two of the Powders; let their Food be of Sea Biſcuits, Starch, or Wafer-paper; and give Glyſters of Chickens Guts Broth, and an Antiſpaſmodic Mixture; or if they have Fits, ſtrong and frequent; a few Grains of Muſk may be added to one or two of the Powders.

Pulv. Aperitivus.

℞ Pulv. e. Senn. c. ϑj.
Magneſia alb. ϑſs M.

To open the Body in coſtive Habits during Pregnancy. Rhub. ϑj. or Jall. ϑſs. may be mixed

ed with the Magnesia, by rubbing them with a Lump of Sugar in a Marble Mortar; or Magnesia. ℈ij. or ʒj. with a Drop or two of ol. Nuc. Mosch. or ol. Anisi. on a Lump of Sugar and rubed well together, may succeed better in delicate Habits.

Pulv. ad. Cardialgiam.

℞ Chel. canc. ppt. ʒj.
Magnesia alb. ʒss.
Ol. Nuc. Moschat. gutt. xij. M. et in Chart xij. divide, pro re nata in aq. tepid hausstulus sumendus.

In lax Habits Chalk and Water will cure the Heartburn, but it is too astringent for common Use. A few Grains of Bark and Valerian may be some Times necessary.

Pulvis Cordialis.

℞ Pulv. Contray. c. ℈ij.
Castor. russ.
Sal. Nitri. aa. ℈j. M. ft. pulv. No. 4.

One to be taken every six Hours in Wine Whey, Mint and Baum, or Sage-tea, to promote Perspiration in Fevers, or faint Colds.

Pulv. Corroborans.

℞ Pulv. e. Succino. c. ʒij.
Gu. Arabic. p.
Salop. p. aa. ʒss. M. ft. pulv. No. vj.

One to be taken three Times a Day, in any Liquid for the Whites, or any Weaknesses after the Month: they are also useful in slight Floodings with Tinct. Rosar.

Pulv. Catharticus.

℞ Rad. Jallap. p. ℈j.
Sal. Nit. p. ℈ss.
Zinzib. p. gr. v. M.

Or,

℞ Rad. Rhab. p. ℈j.
Sal. Nitri. ℈ss.
Ol. Anisi. gutt. iij. M.

To

To purge off watery or cold Humours; they muſt be well incorporated in a Marble Mortar.

Ungt. Emolliens.

℞ Ungt. e. flor. Sambuci. ℥ij.
ex. Alth.
Ol. Palmæ. aa. ℥ſs. M.

For Lumps in the Breaſts, Tumefactions of the Labiæ, &c. to this may be added Ungt. Cerul. fort. ℥j. vel. ℥ſs. with or without a little Camphire for very hard and obſtinate Tumours.

Ungt. Hæmorrhoidale.

℞ Ungt. e. flor. Sambuci. ℥ij.
Ol. Lini ℥j.
Flor. ſulph. ℥ſs.
Ovium unius vitelle M. s. a.

This Ointment, or a Common Bread and Milk Poultice, with ſome flos. ſulph. mixed with it, will often cure the Piles, when ſulphureous Medicines (which are in Fact their only effectual remedies) cannot be taken by the Mouth.

FINIS.